[MS-ADA2]:

Active Directory Schema Attributes M

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Revision Summary

Date	Revision History	Revision Class	Comments
2/22/2007	0.01	New	Version 0.01 release
6/1/2007	1.0	Major	Updated and revised the technical content.
7/3/2007	2.0	Major	Corrected reference for mustContain attribute. Changed introductory text and added reference. Added DFS content.
7/20/2007	2.1	Minor	Enhanced descriptions for MSMQ attributes.
8/10/2007	2.1.1	Editorial	Changed language and formatting in the technical content.
9/28/2007	2.1.2	Editorial	Changed language and formatting in the technical content.
10/23/2007	2.1.3	Editorial	Changed language and formatting in the technical content.
11/30/2007	3.0	Major	Deleted object.
1/25/2008	4.0	Major	Updated and revised the technical content.
3/14/2008	4.1	Minor	Clarified status of several attributes.
5/16/2008	4.1.1	Editorial	Changed language and formatting in the technical content.
6/20/2008	4.2	Minor	Clarified the meaning of the technical content.
7/25/2008	5.0	Major	Updated and revised the technical content.
8/29/2008	6.0	Major	Updated and revised the technical content.
10/24/2008	7.0	Major	Updated and revised the technical content.
12/5/2008	8.0	Major	Updated and revised the technical content.
1/16/2009	9.0	Major	Updated and revised the technical content.
2/27/2009	9.0.1	Editorial	Changed language and formatting in the technical content.
4/10/2009	9.0.2	Editorial	Changed language and formatting in the technical content.
5/22/2009	9.0.3	Editorial	Changed language and formatting in the technical content.
7/2/2009	9.1	Minor	Clarified the meaning of the technical content.
8/14/2009	9.2	Minor	Clarified the meaning of the technical content.
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11/6/2009	11.0	Major	Updated and revised the technical content.
12/18/2009	12.0	Major	Updated and revised the technical content.
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1 Introduction

Active Directory Schema Attributes M contains a partial list of the objects that exist in the Active Directory schema; it contains schema objects of type "attribute" whose names start with the letter M. Active Directory and all associated terms and concepts are described in the document titled "Active Directory Technical Specification", which has the following normative reference:

[MS-ADTS] Microsoft Corporation, "Active Directory Technical Specification".

Note This document is not intended to stand on its own; it is intended to act as an appendix to the Active Directory Technical Specification, as specified in the normative reference shown above. For details about the Active Directory schema, see [MS-ADTS] section 3.1.1.2 (Active Directory Schema).

Note The object definitions in this document are also available for download in LDAP Data Interchange Format (LDIF) at the following location: [MSFT-ADSCHEMA].

1.1 References

[MS-ADA1] Microsoft Corporation, "Active Directory Schema Attributes A-L".

[MS-ADA3] Microsoft Corporation, "Active Directory Schema Attributes N-Z".

[MS-ADOD] Microsoft Corporation, "Active Directory Protocols Overview".

[MS-ADSC] Microsoft Corporation, "Active Directory Schema Classes".

[MS-ADTS] Microsoft Corporation, "Active Directory Technical Specification".

[MS-DRSR] Microsoft Corporation, "Directory Replication Service (DRS) Remote Protocol".

[MS-DTYP] Microsoft Corporation, "Windows Data Types".

[MS-LSAD] Microsoft Corporation, "Local Security Authority (Domain Policy) Remote Protocol".

[MS-RDC] Microsoft Corporation, "Remote Differential Compression Algorithm".

[MS-SAMR] Microsoft Corporation, "Security Account Manager (SAM) Remote Protocol (Client-to-Server)".

[MS-WPO] Microsoft Corporation, "Windows Protocols Overview".

[MSDN-ACL] Microsoft Corporation, "ACL structure", http://msdn.microsoft.com/en-us/library/aa374931.aspx

[MSFT-ADSCHEMA] Microsoft Corporation, "Combined Active Directory Schema Classes and Attributes for Windows Server", February 2011, http://www.microsoft.com/downloads/en/details.aspx?displaylang=en&FamilyID=da2fc73a-3d35-484c-9bea-f023dcba7275

[RFC2327] Handley, M. and Jacobson, V., "SDP: Session Description Protocol", RFC 2327, April 1998, http://www.ietf.org/rfc/rfc2327.txt

[RFC2849] Good, G., "The LDAP Data Interchange Format (LDIF) - Technical Specification", RFC 2849, June 2000, http://www.ietf.org/rfc/rfc2849.txt

[X400] ITU-T, "Message handling systems - Message handling system and service overview", Recommendation F.400/X.400, June 1999, http://www.itu.int/rec/T-REC-X.400/en

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2 Attributes

The following sections specify attributes in the Active Directory schema whose names start with the letter M.

These sections normatively specify the schema definition of each attribute and version-specific behavior of those schema definitions (such as when the attribute was added to the schema). Additionally, as an aid to the reader some of the sections include informative notes about how the attribute can be used.

Note Lines of text in the attribute definitions that are excessively long have been "folded" in accordance with [RFC2849] Note 2.

2.1 Attribute macAddress

This attribute specifies the Media Access Control (MAC) address of a network endpoint in colon-separated hexadecimal notation.

```
cn: MacAddress
ldapDisplayName: macAddress
attributeId: 1.3.6.1.1.1.1.22
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: e6a522dd-9770-43e1-89de-1de5044328f7
systemOnly: FALSE
searchFlags: 0
rangeUpper: 128
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 operating system, Windows Server 2008 operating system, Windows Server 2008 R2 operating system, Windows Server 2012 operating system, Windows Server 2012 R2 operating system, and Windows Server 2016 operating system.

2.2 Attribute machineArchitecture

This attribute specifies a list of hardware processors supported by a given application.

```
cn: Machine-Architecture
ldapDisplayName: machineArchitecture
attributeId: 1.2.840.113556.1.4.68
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: FALSE
schemaIdGuid: bf9679af-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server operating system, Windows Server 2003 operating system, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.3 Attribute machinePasswordChangeInterval

```
cn: Machine-Password-Change-Interval
ldapDisplayName: machinePasswordChangeInterval
```


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```
attributeId: 1.2.840.113556.1.4.520
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: c9b6358e-bb38-11d0-afef-0000f80367c1
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b89fe-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.4 Attribute machineRole

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: Machine-Role
ldapDisplayName: machineRole
attributeId: 1.2.840.113556.1.4.71
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: TRUE
schemaIdGuid: bf9679b2-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.5 Attribute machineWidePolicy

For a given Active Directory domain, this attribute specifies the policy to be replicated to the clients.

```
cn: Machine-Wide-Policy
ldapDisplayName: machineWidePolicy
attributeId: 1.2.840.113556.1.4.459
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 80a67e4f-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b8a01-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.6 Attribute mail

This attribute specifies the list of email addresses belonging to a contact object in the directory.

```
cn: E-mail-Addresses
ldapDisplayName: mail
attributeId: 0.9.2342.19200300.100.1.3
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967961-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 256
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14846
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.7 Attribute mailAddress

This attribute specifies the email address to be used by a DC when email–based replication is configured.

```
cn: SMTP-Mail-Address
ldapDisplayName: mailAddress
attributeId: 1.2.840.113556.1.4.786
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 26d9736f-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.8 Attribute managedBy

This attribute can be used by administrators to specify the DN of an object representing the entity assigned to manage this object. A read-only domain controller object uses this attribute to store the DNs of security principals who would be implicit members of the Administrators group of the RODC as specified in [MS-ADTS] section 6.1.1.3.2.

```
cn: Managed-By
ldapDisplayName: managedBy
attributeId: 1.2.840.113556.1.4.653
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
```


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```
isSingleValued: TRUE
schemaIdGuid: 0296c120-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 72
mapiID: 32780
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.9 Attribute managedObjects

This attribute specifies the list of objects that are managed by a user.

```
cn: Managed-Objects
ldapDisplayName: managedObjects
attributeId: 1.2.840.113556.1.4.654
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 0296c124-40da-11d1-a9c0-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 73
mapiID: 32804
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.10 Attribute manager

For user object *a*, this attribute specifies the name of the user who is *a*'s manager.

```
cn: Manager
ldapDisplayName: manager
attributeId: 0.9.2342.19200300.100.1.10
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf9679b5-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
linkID: 42
mapiID: 32773
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.11 Attribute mAPIID

This attribute specifies an integer used by Messaging Application Program Interface (MAPI) clients to define behavior.

```
cn: MAPI-ID
ldapDisplayName: mAPIID
attributeId: 1.2.840.113556.1.2.49
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679b7-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 32974
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.12 Attribute marshalledInterface

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: Marshalled-Interface
ldapDisplayName: marshalledInterface
attributeId: 1.2.840.113556.1.4.72
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf9679b9-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.13 Attribute masteredBy

This attribute specifies the distinguished name (DN) for the NTDS Settings objects, and is the back link for the hasMasterNCs attribute as specified in [MS-ADA1] section 2.289.

```
cn: Mastered-By
ldapDisplayName: masteredBy
attributeId: 1.2.840.113556.1.4.1409
attributeSyntax: 2.5.5.1
omSyntax: 127
```


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```
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: e48e64e0-12c9-11d3-9102-00c04fd91ab1
systemOnly: TRUE
searchFlags: 0
linkID: 77
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.14 Attribute maxPwdAge

This attribute specifies the maximum amount of time that a password is valid. It is stored as a negative FILETIME, which represents a period of time expressed in a negative number of 100-nanosecond time slices. For example, a period of 20 minutes is represented as:

-12000000000

```
cn: Max-Pwd-Age
ldapDisplayName: maxPwdAge
attributeId: 1.2.840.113556.1.4.74
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679bb-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.15 Attribute maxRenewAge

This attribute specifies the time period (in days) during which a user's ticket-granting ticket (TGT) can be renewed for the purposes of Kerberos authentication.

```
cn: Max-Renew-Age
ldapDisplayName: maxRenewAge
attributeId: 1.2.840.113556.1.4.75
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679bc-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.16 Attribute maxStorage

This attribute specifies the maximum amount of disk space that a given user can consume.

```
cn: Max-Storage
ldapDisplayName: maxStorage
attributeId: 1.2.840.113556.1.4.76
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679bd-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.17 Attribute maxTicketAge

This attribute specifies the maximum amount of time (in hours) that a user's ticket-granting ticket (TGT) can be used for the purpose of Kerberos authentication.

```
cn: Max-Ticket-Age
ldapDisplayName: maxTicketAge
attributeId: 1.2.840.113556.1.4.77
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679be-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.18 Attribute mayContain

This attribute specifies the list of optional attributes for a given class object.

```
cn: May-Contain
ldapDisplayName: mayContain
attributeId: 1.2.840.113556.1.2.25
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf9679bf-0de6-11d0-a285-00aa003049e2
```


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```
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.19 Attribute meetingAdvertiseScope

For a given meeting object, this attribute specifies whether the data contained is visible or advertised outside the corporate network.

```
cn: meetingAdvertiseScope
ldapDisplayName: meetingAdvertiseScope
attributeId: 1.2.840.113556.1.4.582
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc8b-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.20 Attribute meetingApplication

For a given meeting object, this attribute specifies the application that can be used to enable Internet meeting services, for example, Microsoft NetMeeting or Microsoft Exchange 2000 Conferencing Server.

```
cn: meetingApplication
ldapDisplayName: meetingApplication
attributeId: 1.2.840.113556.1.4.573
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc83-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.21 Attribute meetingBandwidth

For a given meeting object, this attribute specifies the bandwidth available to conduct that meeting.

```
cn: meetingBandwidth
ldapDisplayName: meetingBandwidth
```


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```
attributeId: 1.2.840.113556.1.4.589
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: 11b6cc92-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.22 Attribute meetingBlob

For a given meeting object, this attribute specifies general information about the meeting. The structure of the contents of this attribute is not constrained by Active Directory and is determined by the application that uses the binary large object (BLOB).

```
cn: meetingBlob
ldapDisplayName: meetingBlob
attributeId: 1.2.840.113556.1.4.590
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 11b6cc93-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.23 Attribute meetingContactInfo

For a given meeting object, this attribute specifies how meeting attendees can attend the meeting by using the contact information specified, for example, a phone number or URL.

```
cn: meetingContactInfo
ldapDisplayName: meetingContactInfo
attributeId: 1.2.840.113556.1.4.578
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc87-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.24 Attribute meetingDescription

For a given meeting object, this attribute specifies a description of the meeting (for example, agenda and attendees).

```
cn: meetingDescription
ldapDisplayName: meetingDescription
attributeId: 1.2.840.113556.1.4.567
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc7e-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.25 Attribute meetingEndTime

For a given meeting object, this attribute specifies the end date and time of a meeting.

```
cn: meetingEndTime
ldapDisplayName: meetingEndTime
attributeId: 1.2.840.113556.1.4.588
attributeSyntax: 2.5.5.11
omSyntax: 23
isSingleValued: FALSE
schemaIdGuid: 11b6cc91-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.26 Attribute meetingID

For a given meeting object, this attribute specifies a numerical ID for the meeting.

```
cn: meetingID
ldapDisplayName: meetingID
attributeId: 1.2.840.113556.1.4.565
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc7c-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.27 Attribute meetingIP

For a given meeting object, this attribute specifies an IP address for the online meeting.

```
cn: meetingIP
ldapDisplayName: meetingIP
attributeId: 1.2.840.113556.1.4.580
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc89-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.28 Attribute meetingIsEncrypted

For a given meeting object, this attribute specifies whether network traffic associated with the meeting is to be encrypted. A value of TRUE indicates that encryption is required.

```
cn: meetingIsEncrypted
ldapDisplayName: meetingIsEncrypted
attributeId: 1.2.840.113556.1.4.585
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc8e-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.29 Attribute meetingKeyword

For a given meeting object, this attribute specifies a keyword that enables users to search for the meeting.

```
cn: meetingKeyword
ldapDisplayName: meetingKeyword
attributeId: 1.2.840.113556.1.4.568
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc7f-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.30 Attribute meetingLanguage

For a given meeting object, this attribute specifies the language of the meeting.

```
cn: meetingLanguage
ldapDisplayName: meetingLanguage
attributeId: 1.2.840.113556.1.4.574
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc84-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.31 Attribute meetingLocation

For a given meeting object, this attribute specifies the physical location of the meeting.

```
cn: meetingLocation
ldapDisplayName: meetingLocation
attributeId: 1.2.840.113556.1.4.569
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc80-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.32 Attribute meetingMaxParticipants

For a given meeting object, this attribute specifies the maximum number of participants for the meeting.

```
cn: meetingMaxParticipants
ldapDisplayName: meetingMaxParticipants
attributeId: 1.2.840.113556.1.4.576
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 11b6cc85-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.33 Attribute meetingName

For a given meeting object, this attribute specifies the name of the meeting.

```
cn: meetingName
ldapDisplayName: meetingName
attributeId: 1.2.840.113556.1.4.566
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc7d-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.34 Attribute meetingOriginator

For a given meeting object, this attribute specifies the name of the individual who scheduled the meeting.

```
cn: meetingOriginator
ldapDisplayName: meetingOriginator
attributeId: 1.2.840.113556.1.4.577
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc86-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.35 Attribute meetingOwner

For a given meeting object, this attribute specifies the name of the individual who owns the meeting.

```
cn: meetingOwner
ldapDisplayName: meetingOwner
attributeId: 1.2.840.113556.1.4.579
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc88-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.36 Attribute meetingProtocol

For a given meeting object, this attribute specifies the video conferencing protocol(s) to be used for the meeting, for example, H.320 or T.120.

```
cn: meetingProtocol
ldapDisplayName: meetingProtocol
attributeId: 1.2.840.113556.1.4.570
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc81-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.37 Attribute meetingRating

For a given meeting object, this attribute specifies the Platform for Internet Content Selection (PICS) rating for the meeting.

```
cn: meetingRating
ldapDisplayName: meetingRating
attributeId: 1.2.840.113556.1.4.584
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc8d-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.38 Attribute meetingRecurrence

For a given meeting object, this attribute specifies the recurrence parameters for the meeting, for example, "Every weekday, 6/1/2006–6/1/2007". The semantics of this attribute are not determined by Active Directory but by the application that uses the attribute.

```
cn: meetingRecurrence
ldapDisplayName: meetingRecurrence
attributeId: 1.2.840.113556.1.4.586
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc8f-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.39 Attribute meetingScope

For a given meeting object, this attribute specifies the scope of the meeting (for example, global or local). The semantics of this attribute are not determined by Active Directory but by the application that uses the attribute.

```
cn: meetingScope
ldapDisplayName: meetingScope
attributeId: 1.2.840.113556.1.4.581
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc8a-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.40 Attribute meetingStartTime

For a given meeting object, this attribute specifies the start date and time of the meeting.

```
cn: meetingStartTime
ldapDisplayName: meetingStartTime
attributeId: 1.2.840.113556.1.4.587
attributeSyntax: 2.5.5.11
omSyntax: 23
isSingleValued: FALSE
schemaIdGuid: 11b6cc90-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.41 Attribute meetingType

For a given meeting object, this attribute specifies the type of the meeting. The semantics of this attribute are not determined by Active Directory but by the application that uses the attribute.

```
cn: meetingType
ldapDisplayName: meetingType
attributeId: 1.2.840.113556.1.4.571
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 11b6cc82-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.42 Attribute meetingURL

For a given meeting object, this attribute specifies the URL for the meeting.

```
cn: meetingURL
ldapDisplayName: meetingURL
attributeId: 1.2.840.113556.1.4.583
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11b6cc8c-48c4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.43 Attribute member

For a given group object, this attribute specifies the list of objects that belong to the group, except for user accounts whose primaryGroupID specifies the given group object. Those user accounts are members of the group, although they are not reflected in this attribute. For more information, refer to primaryGroupID [MS-ADA3] section 2.120.

```
cn: Member
ldapDisplayName: member
attributeId: 2.5.4.31
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf9679c0-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: bc0ac240-79a9-11d0-9020-00c04fc2d4cf
linkID: 2
mapiID: 32777
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.44 Attribute memberNisNetgroup

For a given group object, this attribute specifies the list of netgroups that are members of this netgroup.

```
cn: MemberNisNetgroup
ldapDisplayName: memberNisNetgroup
attributeId: 1.3.6.1.1.1.1.13
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 0f6a17dc-53e5-4be8-9442-8f3ce2f9012a
systemOnly: FALSE
searchFlags: 0
rangeUpper: 153600
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.45 Attribute memberOf

For a given user or group object, this attribute specifies the distinguished names of the groups to which this object belongs, except for a user object's primary group. The user object's primary group is specified by the primaryGroupID attribute. The user is a member of the group specified by the primaryGroupID attribute, although this is not reflected in the memberOf attribute. For more information, refer to primaryGroupID [MS-ADA3] section 2.120.

```
cn: Is-Member-Of-DL
ldapDisplayName: memberOf
attributeId: 1.2.840.113556.1.2.102
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf967991-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fCOPY
attributeSecurityGuid: bc0ac240-79a9-11d0-9020-00c04fc2d4cf
linkID: 3
mapiID: 32776
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.46 Attribute memberUid

For a given group object, this attribute specifies the logon names of the members of the group.

```
cn: MemberUid
ldapDisplayName: memberUid
attributeId: 1.3.6.1.1.1.1.12
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 03dab236-672e-4f61-ab64-f77d2dc2ffab
```


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```
systemOnly: FALSE
searchFlags: 0
rangeUpper: 256000
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.47 Attribute mhsORAddress

For a given user or contact object, this attribute specifies the X.400 address [X400] of the individual represented by that object.

```
cn: MHS-OR-Address
ldapDisplayName: mhsORAddress
attributeId: 1.2.840.113556.1.4.650
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0296c122-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.48 Attribute middleName

For a given user or contact object, this attribute specifies the middle name of the individual represented by that object.

```
cn: Other-Name
ldapDisplayName: middleName
attributeId: 2.16.840.1.113730.3.1.34
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679f2-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 64
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.49 Attribute minPwdAge

For a given security principle, this attribute specifies the minimum amount of time that a password can be used. It is stored as a negative FILETIME, which represents a period of time expressed in a negative number of 100-nanosecond time slices. For example, a period of 20 minutes is represented as:

-12000000000

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```
cn: Min-Pwd-Age
ldapDisplayName: minPwdAge
attributeId: 1.2.840.113556.1.4.78
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679c2-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.50 Attribute minPwdLength

For a given security principle, this attribute specifies the minimum number of characters that a password has to contain.

```
cn: Min-Pwd-Length
ldapDisplayName: minPwdLength
attributeId: 1.2.840.113556.1.4.79
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679c3-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.51 Attribute minTicketAge

For a given security principle, this attribute specifies the minimum time period (in hours) that a user's TGT can be used for Kerberos authentication before a request can be made to renew the ticket.

```
cn: Min-Ticket-Age
ldapDisplayName: minTicketAge
attributeId: 1.2.840.113556.1.4.80
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679c4-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.52 Attribute mobile

For a given user or contact object, this attribute specifies the primary mobile phone number of the individual represented by that object.

```
cn: Phone-Mobile-Primary
ldapDisplayName: mobile
attributeId: 0.9.2342.19200300.100.1.41
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ffa3-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14876
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.53 Attribute modifiedCount

This attribute specifies the NetLogon change log serial number, as specified in [MS-SAMR] section 2.2.4.1.

```
cn: Modified-Count
ldapDisplayName: modifiedCount
attributeId: 1.2.840.113556.1.4.168
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679c5-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, attribute attributeSecurityGuid is not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.54 Attribute modifiedCountAtLastProm

This attribute specifies the NetLogon change log serial number at the last update, as specified in [MS-SAMR] section 2.2.4.1.

```
cn: Modified-Count-At-Last-Prom
ldapDisplayName: modifiedCountAtLastProm
attributeId: 1.2.840.113556.1.4.81
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679c6-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.55 Attribute modifyTimeStamp

For a given object, this attribute specifies the date when that object was last changed.

```
cn: Modify-Time-Stamp
ldapDisplayName: modifyTimeStamp
attributeId: 2.5.18.2
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 9a7ad94a-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.56 Attribute moniker

For a given Component Object Model (COM) object, this attribute specifies the name or path location for that COM object.

```
cn: Moniker
ldapDisplayName: moniker
attributeId: 1.2.840.113556.1.4.82
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf9679c7-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.57 Attribute monikerDisplayName

For a given COM object, this attribute specifies the display name of that COM object.

```
cn: Moniker-Display-Name
ldapDisplayName: monikerDisplayName
attributeId: 1.2.840.113556.1.4.83
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf9679c8-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.58 Attribute moveTreeState

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: Move-Tree-State
ldapDisplayName: moveTreeState
attributeId: 1.2.840.113556.1.4.1305
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 1f2ac2c8-3b71-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.59 Attribute mS-DS-ConsistencyChildCount

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-DS-Consistency-Child-Count
ldapDisplayName: mS-DS-ConsistencyChildCount
attributeId: 1.2.840.113556.1.4.1361
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 178b7bc2-b63a-11d2-90e1-00c04fd91ab1
```


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```
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.60 Attribute mS-DS-ConsistencyGuid

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-DS-Consistency-Guid
ldapDisplayName: mS-DS-ConsistencyGuid
attributeId: 1.2.840.113556.1.4.1360
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 23773dc2-b63a-11d2-90e1-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.61 Attribute mS-DS-CreatorSID

For a given object, this attribute specifies the security identifier (SID), as defined in [MS-DTYP] section 2.4.2, of the account that created the object.

```
cn: MS-DS-Creator-SID
ldapDisplayName: mS-DS-CreatorSID
attributeId: 1.2.840.113556.1.4.1410
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: c5e60132-1480-11d3-91c1-0000f87a57d4
systemOnly: TRUE
searchFlags: fATTINDEX
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.62 Attribute ms-DS-MachineAccountQuota

For a given security principle, this attribute specifies, the quota of machine accounts that can be allocated, as specified in [MS-ADTS] section 6.1.1.4.

```
cn: MS-DS-Machine-Account-Quota
```


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```
ldapDisplayName: ms-DS-MachineAccountQuota
attributeId: 1.2.840.113556.1.4.1411
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d064fb68-1480-11d3-91c1-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.63 Attribute mS-DS-ReplicatesNCReason

This attribute specifies the ntdsConnection object that indicates the connection as used by the Knowledge Consistency Checker (KCC) in the replication topology, as specified in [MS-ADTS] section 6.1.1.2.2.1.2.1.2.

```
cn: MS-DS-Replicates-NC-Reason
ldapDisplayName: mS-DS-ReplicatesNCReason
attributeId: 1.2.840.113556.1.4.1408
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
schemaIdGuid: 0ea12b84-08b3-11d3-91bc-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.64 Attribute ms-net-ieee-80211-GP-PolicyData

This attribute contains all the settings and data that comprise a group policy configuration for 802.11 wireless networks.

```
cn: ms-net-ieee-80211-GP-PolicyData
ldapDisplayName: ms-net-ieee-80211-GP-PolicyData
attributeId: 1.2.840.113556.1.4.1952
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 9c1495a5-4d76-468e-991e-1433b0a67855
systemOnly: FALSE
searchFlags: 0
rangeUpper: 4194304
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.65 Attribute ms-net-ieee-80211-GP-PolicyGUID

This attribute contains a GUID that identifies a specific 802.11 group policy object on the domain. GUID is defined in [MS-DTYP] section 2.3.4.

```
cn: ms-net-ieee-80211-GP-PolicyGUID
ldapDisplayName: ms-net-ieee-80211-GP-PolicyGUID
attributeId: 1.2.840.113556.1.4.1951
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 35697062-1eaf-448b-ac1e-388e0be4fdee
systemOnly: FALSE
searchFlags: 0
rangeUpper: 64
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.66 Attribute ms-net-ieee-80211-GP-PolicyReserved

This attribute is reserved for future use.

```
cn: ms-net-ieee-80211-GP-PolicyReserved
ldapDisplayName: ms-net-ieee-80211-GP-PolicyReserved
attributeId: 1.2.840.113556.1.4.1953
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 0f69c62e-088e-4ff5-a53a-e923cec07c0a
systemOnly: FALSE
searchFlags: 0
rangeUpper: 4194304
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.67 Attribute ms-net-ieee-8023-GP-PolicyData

This attribute contains all the settings and data that comprise a group policy configuration for 802.3 wired networks.

```
cn: ms-net-ieee-8023-GP-PolicyData
ldapDisplayName: ms-net-ieee-8023-GP-PolicyData
attributeId: 1.2.840.113556.1.4.1955
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8398948b-7457-4d91-bd4d-8d7ed669c9f7
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1048576
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.68 Attribute ms-net-ieee-8023-GP-PolicyGUID

This attribute contains a GUID that identifies a specific 802.3 group policy object on the domain.

```
cn: ms-net-ieee-8023-GP-PolicyGUID
ldapDisplayName: ms-net-ieee-8023-GP-PolicyGUID
attributeId: 1.2.840.113556.1.4.1954
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 94a7b05a-b8b2-4f59-9c25-39e69baa1684
systemOnly: FALSE
searchFlags: 0
rangeUpper: 64
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.69 Attribute ms-net-ieee-8023-GP-PolicyReserved

This attribute is reserved for future use.

```
cn: ms-net-ieee-8023-GP-PolicyReserved
ldapDisplayName: ms-net-ieee-8023-GP-PolicyReserved
attributeId: 1.2.840.113556.1.4.1956
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: d3c527c7-2606-4deb-8cfd-18426feec8ce
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1048576
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.70 Attribute mS-SQL-Alias

This attribute is used by Microsoft SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Alias
ldapDisplayName: mS-SQL-Alias
attributeId: 1.2.840.113556.1.4.1395
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: e0c6baae-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.71 Attribute mS-SQL-AllowAnonymousSubscription

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-AllowAnonymousSubscription
ldapDisplayName: mS-SQL-AllowAnonymousSubscription
attributeId: 1.2.840.113556.1.4.1394
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: db77be4a-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.72 Attribute mS-SQL-AllowImmediateUpdatingSubscription

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-AllowImmediateUpdatingSubscription
ldapDisplayName: mS-SQL-AllowImmediateUpdatingSubscription
attributeId: 1.2.840.113556.1.4.1404
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: c4186b6e-d34b-11d2-999a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.73 Attribute mS-SQL-AllowKnownPullSubscription

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-AllowKnownPullSubscription
ldapDisplayName: mS-SQL-AllowKnownPullSubscription
attributeId: 1.2.840.113556.1.4.1403
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: c3bb7054-d34b-11d2-999a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.74 Attribute mS-SQL-AllowQueuedUpdatingSubscription

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-AllowQueuedUpdatingSubscription
ldapDisplayName: mS-SQL-AllowQueuedUpdatingSubscription
attributeId: 1.2.840.113556.1.4.1405
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: c458ca80-d34b-11d2-999a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.75 Attribute mS-SQL-AllowSnapshotFilesFTPDownloading

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-AllowSnapshotFilesFTPDownloading
ldapDisplayName: mS-SQL-AllowSnapshotFilesFTPDownloading
attributeId: 1.2.840.113556.1.4.1406
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: c49b8be8-d34b-11d2-999a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.76 Attribute mS-SQL-AppleTalk

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-AppleTalk
ldapDisplayName: mS-SQL-AppleTalk
attributeId: 1.2.840.113556.1.4.1378
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
```


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```
schemaIdGuid: 8fda89f4-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.77 Attribute mS-SQL-Applications

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Applications
ldapDisplayName: mS-SQL-Applications
attributeId: 1.2.840.113556.1.4.1400
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: fbcda2ea-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.78 Attribute mS-SQL-Build

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Build
ldapDisplayName: mS-SQL-Build
attributeId: 1.2.840.113556.1.4.1368
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 603e94c4-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.79 Attribute mS-SQL-CharacterSet

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-CharacterSet
ldapDisplayName: mS-SQL-CharacterSet
attributeId: 1.2.840.113556.1.4.1370
```


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```
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 696177a6-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.80 Attribute mS-SQL-Clustered

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Clustered
ldapDisplayName: mS-SQL-Clustered
attributeId: 1.2.840.113556.1.4.1373
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 7778bd90-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.81 Attribute mS-SQL-ConnectionURL

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-ConnectionURL
ldapDisplayName: mS-SQL-ConnectionURL
attributeId: 1.2.840.113556.1.4.1383
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a92d23da-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.82 Attribute mS-SQL-Contact

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: MS-SQL-Contact
ldapDisplayName: mS-SQL-Contact
attributeId: 1.2.840.113556.1.4.1365
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4f6cbdd8-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.83 Attribute mS-SQL-CreationDate

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-CreationDate
ldapDisplayName: mS-SQL-CreationDate
attributeId: 1.2.840.113556.1.4.1397
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ede14754-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.84 Attribute mS-SQL-Database

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Database
ldapDisplayName: mS-SQL-Database
attributeId: 1.2.840.113556.1.4.1393
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: d5a0dbdc-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.85 Attribute mS-SQL-Description

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Description
ldapDisplayName: mS-SQL-Description
attributeId: 1.2.840.113556.1.4.1390
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8386603c-ccef-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.86 Attribute mS-SQL-GPSHeight

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-GPSHeight
ldapDisplayName: mS-SQL-GPSHeight
attributeId: 1.2.840.113556.1.4.1387
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bcdd4f0e-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.87 Attribute mS-SQL-GPSLatitude

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-GPSLatitude
ldapDisplayName: mS-SQL-GPSLatitude
attributeId: 1.2.840.113556.1.4.1385
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b222ba0e-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.88 Attribute mS-SQL-GPSLongitude

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-GPSLongitude
ldapDisplayName: mS-SQL-GPSLongitude
attributeId: 1.2.840.113556.1.4.1386
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b7577c94-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.89 Attribute mS-SQL-InformationDirectory

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-InformationDirectory
ldapDisplayName: mS-SQL-InformationDirectory
attributeId: 1.2.840.113556.1.4.1392
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: d0aedb2e-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.90 Attribute mS-SQL-InformationURL

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-InformationURL
ldapDisplayName: mS-SQL-InformationURL
attributeId: 1.2.840.113556.1.4.1382
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a42cd510-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.91 Attribute mS-SQL-Keywords

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Keywords
ldapDisplayName: mS-SQL-Keywords
attributeId: 1.2.840.113556.1.4.1401
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 01e9a98a-ccef-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.92 Attribute mS-SQL-Language

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Language
ldapDisplayName: mS-SQL-Language
attributeId: 1.2.840.113556.1.4.1389
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: c57f72f4-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.93 Attribute mS-SQL-LastBackupDate

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-LastBackupDate
ldapDisplayName: mS-SQL-LastBackupDate
attributeId: 1.2.840.113556.1.4.1398
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
```


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```
schemaIdGuid: f2b6abca-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.94 Attribute mS-SQL-LastDiagnosticDate

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-LastDiagnosticDate
ldapDisplayName: mS-SQL-LastDiagnosticDate
attributeId: 1.2.840.113556.1.4.1399
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f6d6dd88-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.95 Attribute mS-SQL-LastUpdatedDate

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-LastUpdatedDate
ldapDisplayName: mS-SQL-LastUpdatedDate
attributeId: 1.2.840.113556.1.4.1381
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 9fcc43d4-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.96 Attribute mS-SQL-Location

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Location
ldapDisplayName: mS-SQL-Location
attributeId: 1.2.840.113556.1.4.1366
```


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```
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 561c9644-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.97 Attribute mS-SQL-Memory

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Memory
ldapDisplayName: mS-SQL-Memory
attributeId: 1.2.840.113556.1.4.1367
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 5b5d448c-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.98 Attribute mS-SQL-MultiProtocol

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-MultiProtocol
ldapDisplayName: mS-SQL-MultiProtocol
attributeId: 1.2.840.113556.1.4.1375
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8157fa38-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.99 Attribute mS-SQL-Name

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: MS-SQL-Name
ldapDisplayName: mS-SQL-Name
attributeId: 1.2.840.113556.1.4.1363
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3532dfd8-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.100 Attribute mS-SQL-NamedPipe

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-NamedPipe
ldapDisplayName: mS-SQL-NamedPipe
attributeId: 1.2.840.113556.1.4.1374
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7b91c840-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.101 Attribute mS-SQL-PublicationURL

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-PublicationURL
ldapDisplayName: mS-SQL-PublicationURL
attributeId: 1.2.840.113556.1.4.1384
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ae0c11b8-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.102 Attribute mS-SQL-Publisher

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Publisher
ldapDisplayName: mS-SQL-Publisher
attributeId: 1.2.840.113556.1.4.1402
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: c1676858-d34b-11d2-999a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.103 Attribute mS-SQL-RegisteredOwner

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-RegisteredOwner
ldapDisplayName: mS-SQL-RegisteredOwner
attributeId: 1.2.840.113556.1.4.1364
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 48fd44ea-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.104 Attribute mS-SQL-ServiceAccount

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-ServiceAccount
ldapDisplayName: mS-SQL-ServiceAccount
attributeId: 1.2.840.113556.1.4.1369
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 64933a3e-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.105 Attribute mS-SQL-Size

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Size
ldapDisplayName: mS-SQL-Size
attributeId: 1.2.840.113556.1.4.1396
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: e9098084-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.106 Attribute mS-SQL-SortOrder

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-SortOrder
ldapDisplayName: mS-SQL-SortOrder
attributeId: 1.2.840.113556.1.4.1371
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 6ddc42c0-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.107 Attribute mS-SQL-SPX

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-SPX
ldapDisplayName: mS-SQL-SPX
attributeId: 1.2.840.113556.1.4.1376
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 86b08004-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.108 Attribute mS-SQL-Status

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Status
ldapDisplayName: mS-SQL-Status
attributeId: 1.2.840.113556.1.4.1380
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 9a7d4770-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.109 Attribute mS-SQL-TCPIP

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-TCPIP
ldapDisplayName: mS-SQL-TCPIP
attributeId: 1.2.840.113556.1.4.1377
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8ac263a6-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.110 Attribute mS-SQL-ThirdParty

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-ThirdParty
ldapDisplayName: mS-SQL-ThirdParty
attributeId: 1.2.840.113556.1.4.1407
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
```


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```
schemaIdGuid: c4e311fc-d34b-11d2-999a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.111 Attribute mS-SQL-Type

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Type
ldapDisplayName: mS-SQL-Type
attributeId: 1.2.840.113556.1.4.1391
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ca48eba8-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.112 Attribute mS-SQL-UnicodeSortOrder

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-UnicodeSortOrder
ldapDisplayName: mS-SQL-UnicodeSortOrder
attributeId: 1.2.840.113556.1.4.1372
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 72dc918a-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.113 Attribute mS-SQL-Version

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Version
ldapDisplayName: mS-SQL-Version
attributeId: 1.2.840.113556.1.4.1388
```


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```
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: c07cc1d0-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.114 Attribute mS-SQL-Vines

This attribute is used by SQL Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MS-SQL-Vines
ldapDisplayName: mS-SQL-Vines
attributeId: 1.2.840.113556.1.4.1379
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 94c56394-ccee-11d2-9993-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.115 Attribute msAuthz-CentralAccessPolicyID

For a Central Access Policy, this attribute defines a GUID that can be used to identify the set of policies when applied to a resource.

```
cn: ms-Authz-Central-Access-Policy-ID
ldapDisplayName: msAuthz-CentralAccessPolicyID
attributeId: 1.2.840.113556.1.4.2154
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 62f29b60-be74-4630-9456-2f6691993a86
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.116 Attribute msAuthz-EffectiveSecurityPolicy

For a central access rule, this attribute defines the permission that is applying to the target resources on the central access rule.

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```
cn: ms-Authz-Effective-Security-Policy
ldapDisplayName: msAuthz-EffectiveSecurityPolicy
attributeId: 1.2.840.113556.1.4.2150
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 07831919-8f94-4fb6-8a42-91545dccdad3
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.117 Attribute msAuthz-LastEffectiveSecurityPolicy

For a central access policy entry (CAPE), this attribute defines the security policy that was last applied to the objects that the CAPE is applied to.

```
cn: ms-Authz-Last-Effective-Security-Policy
ldapDisplayName: msAuthz-LastEffectiveSecurityPolicy
attributeId: 1.2.840.113556.1.4.2152
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 8e1685c6-3e2f-48a2-a58d-5af0ea789fa0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.118 Attribute msAuthz-MemberRulesInCentralAccessPolicy

For a central access policy, this attribute identifies the central access rules that make up the policy.

```
cn: ms-Authz-Member-Rules-In-Central-Access-Policy
ldapDisplayName: msAuthz-MemberRulesInCentralAccessPolicy
attributeId: 1.2.840.113556.1.4.2155
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 57f22f7a-377e-42c3-9872-cec6f21d2e3e
linkID: 2184
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.119 Attribute msAuthz-MemberRulesInCentralAccessPolicyBL

This attribute is the back link for the msAuthz-MemberRulesInCentralAccessPolicy attribute. For a central access rule object, this attribute references one or more central access policies that point to it.

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```
cn: ms-Authz-Member-Rules-In-Central-Access-Policy-BL
ldapDisplayName: msAuthz-MemberRulesInCentralAccessPolicyBL
attributeId: 1.2.840.113556.1.4.2156
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 516e67cf-fedd-4494-bb3a-bc506a948891
linkID: 2185
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.120 Attribute msAuthz-ProposedSecurityPolicy

This attribute defines, for a central access policy entry (CAPE), the proposed security policy of the objects that the CAPE is applied to.

```
cn: ms-Authz-Proposed-Security-Policy
ldapDisplayName: msAuthz-ProposedSecurityPolicy
attributeId: 1.2.840.113556.1.4.2151
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: b946bece-09b5-4b6a-b25a-4b63a330e80e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.121 Attribute msAuthz-ResourceCondition

For a central access rule, this attribute is an expression that identifies the scope of the target resource to which the policy applies.

```
cn: ms-Authz-Resource-Condition
ldapDisplayName: msAuthz-ResourceCondition
attributeId: 1.2.840.113556.1.4.2153
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 80997877-f874-4c68-864d-6e508a83bdbd
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.122 Attribute msCOM-DefaultPartitionLink

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: ms-COM-DefaultPartitionLink
ldapDisplayName: msCOM-DefaultPartitionLink
attributeId: 1.2.840.113556.1.4.1427
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 998b10f7-aa1a-4364-b867-753d197fe670
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.123 Attribute msCOM-ObjectId

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-COM-ObjectId
ldapDisplayName: msCOM-ObjectId
attributeId: 1.2.840.113556.1.4.1428
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 430f678b-889f-41f2-9843-203b5a65572f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.124 Attribute msCOM-PartitionLink

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-COM-PartitionLink
ldapDisplayName: msCOM-PartitionLink
attributeId: 1.2.840.113556.1.4.1423
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 09abac62-043f-4702-ac2b-6ca15eee5754
systemOnly: FALSE
searchFlags: 0
linkID: 1040
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.125 Attribute msCOM-PartitionSetLink

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-COM-PartitionSetLink
ldapDisplayName: msCOM-PartitionSetLink
attributeId: 1.2.840.113556.1.4.1424
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 67f121dc-7d02-4c7d-82f5-9ad4c950ac34
systemOnly: TRUE
searchFlags: 0
linkID: 1041
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.126 Attribute msCOM-UserLink

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-COM-UserLink
ldapDisplayName: msCOM-UserLink
attributeId: 1.2.840.113556.1.4.1425
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 9e6f3a4d-242c-4f37-b068-36b57f9fc852
systemOnly: TRUE
searchFlags: 0
linkID: 1049
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.127 Attribute msCOM-UserPartitionSetLink

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-COM-UserPartitionSetLink
ldapDisplayName: msCOM-UserPartitionSetLink
attributeId: 1.2.840.113556.1.4.1426
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 8e940c8a-e477-4367-b08d-ff2ff942dcd7
systemOnly: FALSE
searchFlags: 0
linkID: 1048
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.128 Attribute mscopeId

For a given computer object that is a Dynamic Host Configuration Protocol (DHCP) server, this attribute specifies that there is a multicast scope on the DHCP server represented by that object.

```
cn: Mscope-Id
ldapDisplayName: mscopeId
attributeId: 1.2.840.113556.1.4.716
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: TRUE
schemaIdGuid: 963d2751-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.129 Attribute msDFS-Commentv2

A comment associated with a Distributed File System (DFS) root or link.

```
cn: ms-DFS-Comment-v2
ldapDisplayName: msDFS-Commentv2
attributeId: 1.2.840.113556.1.4.2036
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b786cec9-61fd-4523-b2c1-5ceb3860bb32
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32766
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.130 Attribute msDFS-GenerationGUIDv2

This attribute is updated each time the entry that contains this attribute is modified.

```
cn: ms-DFS-Generation-GUID-v2
ldapDisplayName: msDFS-GenerationGUIDv2
attributeId: 1.2.840.113556.1.4.2032
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 35b8b3d9-c58f-43d6-930e-5040f2f1a781
```


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```
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.131 Attribute msDFS-LastModifiedv2

This attribute is updated on each write to the entry that contains the attribute.

```
cn: ms-DFS-Last-Modified-v2
ldapDisplayName: msDFS-LastModifiedv2
attributeId: 1.2.840.113556.1.4.2034
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 3c095e8a-314e-465b-83f5-ab8277bcf29b
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.132 Attribute msDFS-LinkIdentityGUIDv2

This attribute is set only when the link is created.

```
cn: ms-DFS-Link-Identity-GUID-v2
ldapDisplayName: msDFS-LinkIdentityGUIDv2
attributeId: 1.2.840.113556.1.4.2041
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: edb027f3-5726-4dee-8d4e-dbf07e1ad1f1
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.133 Attribute msDFS-LinkPathv2

This attribute specifies the DFS link path relative to the DFS root target share.

```
cn: ms-DFS-Link-Path-v2
ldapDisplayName: msDFS-LinkPathv2
attributeId: 1.2.840.113556.1.4.2039
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 86b021f6-10ab-40a2-a252-1dc0cc3be6a9
```


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```
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32766
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.134 Attribute msDFS-LinkSecurityDescriptorv2

A security descriptor of the DFS link's reparse point on the file system.

```
cn: ms-DFS-Link-Security-Descriptor-v2
ldapDisplayName: msDFS-LinkSecurityDescriptorv2
attributeId: 1.2.840.113556.1.4.2040
attributeSyntax: 2.5.5.15
omSyntax: 66
isSingleValued: TRUE
schemaIdGuid: 57cf87f7-3426-4841-b322-02b3b6e9eba8
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.135 Attribute msDFS-NamespaceIdentityGUIDv2

A GUID to identify the DFS namespace.

```
cn: ms-DFS-Namespace-Identity-GUID-v2
ldapDisplayName: msDFS-NamespaceIdentityGUIDv2
attributeId: 1.2.840.113556.1.4.2033
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 200432ce-ec5f-4931-a525-d7f4afe34e68
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.136 Attribute msDFS-Propertiesv2

Properties associated with DFS root/link.

```
cn: ms-DFS-Properties-v2
ldapDisplayName: msDFS-Propertiesv2
attributeId: 1.2.840.113556.1.4.2037
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0c3e5bc5-eb0e-40f5-9b53-334e958dffdb
```


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```
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.137 Attribute msDFS-SchemaMajorVersion

Major version of the schema of DFS metadata.

```
cn: ms-DFS-Schema-Major-Version
ldapDisplayName: msDFS-SchemaMajorVersion
attributeId: 1.2.840.113556.1.4.2030
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ec6d7855-704a-4f61-9aa6-c49a7c1d54c7
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 2
rangeUpper: 2
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.138 Attribute msDFS-SchemaMinorVersion

Minor version of the schema of DFS metadata.

```
cn: ms-DFS-Schema-Minor-Version
ldapDisplayName: msDFS-SchemaMinorVersion
attributeId: 1.2.840.113556.1.4.2031
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fef9a725-e8f1-43ab-bd86-6a0115ce9e38
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.139 Attribute msDFS-ShortNameLinkPathv2

The short name DFS link path relative to the DFS root target share.

```
cn: ms-DFS-Short-Name-Link-Path-v2
ldapDisplayName: msDFS-ShortNameLinkPathv2
attributeId: 1.2.840.113556.1.4.2042
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: TRUE
schemaIdGuid: 2d7826f0-4cf7-42e9-a039-1110e0d9ca99
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32766
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.140 Attribute msDFS-TargetListv2

Targets corresponding to DFS root/link.

```
cn: ms-DFS-Target-List-v2
ldapDisplayName: msDFS-TargetListv2
attributeId: 1.2.840.113556.1.4.2038
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 6ab126c6-fa41-4b36-809e-7ca91610d48f
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2097152
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.141 Attribute msDFS-Ttlv2

The Time to Live (TTL) associated with a DFS root or link. This attribute is used at DFS referral time.

```
cn: ms-DFS-Ttl-v2
ldapDisplayName: msDFS-Ttlv2
attributeId: 1.2.840.113556.1.4.2035
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ea944d31-864a-4349-ada5-062e2c614f5e
isMemberOfPartialAttributeSet: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.142 Attribute msDFSR-CachePolicy

This attribute is reserved for future use.

```
cn: ms-DFSR-CachePolicy
ldapDisplayName: msDFSR-CachePolicy
attributeId: 1.2.840.113556.1.6.13.3.29
attributeSyntax: 2.5.5.9
omSyntax: 2
```


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```
isSingleValued: TRUE
schemaIdGuid: db7a08e7-fc76-4569-a45f-f5ecb66a88b5
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.143 Attribute msDFSR-CommonStagingPath

This attribute is reserved for future use.

```
cn: ms-DFSR-CommonStagingPath
ldapDisplayName: msDFSR-CommonStagingPath
attributeId: 1.2.840.113556.1.6.13.3.38
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 936eac41-d257-4bb9-bd55-f310a3cf09ad
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.144 Attribute msDFSR-CommonStagingSizeInMb

This attribute is reserved for future use.

```
cn: ms-DFSR-CommonStagingSizeInMb
ldapDisplayName: msDFSR-CommonStagingSizeInMb
attributeId: 1.2.840.113556.1.6.13.3.39
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 135eb00e-4846-458b-8ea2-a37559afd405
searchFlags: 0
rangeLower: 0
rangeUpper: -1
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.145 Attribute msDFSR-ComputerReference

This attribute is used by the Distributed File System Replication Protocol and contains a forward-link to a computer object.

```
cn: ms-DFSR-ComputerReference
ldapDisplayName: msDFSR-ComputerReference
attributeId: 1.2.840.113556.1.6.13.3.101
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 6c7b5785-3d21-41bf-8a8a-627941544d5a
searchFlags: 0
```


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```
linkID: 2050
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.146 Attribute msDFSR-ComputerReferenceBL

This attribute specifies a back link attribute and contains a value used to indicate a back reference from a computer by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-ComputerReferenceBL
ldapDisplayName: msDFSR-ComputerReferenceBL
attributeId: 1.2.840.113556.1.6.13.3.103
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 5eb526d7-d71b-44ae-8cc6-95460052e6ac
searchFlags: 0
linkID: 2051
systemFlags: FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.147 Attribute msDFSR-ConflictPath

This attribute specifies the full path of the conflict directory used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-ConflictPath
ldapDisplayName: msDFSR-ConflictPath
attributeId: 1.2.840.113556.1.6.13.3.7
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5cf0bcc8-60f7-4bff-bda6-aea0344eb151
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.148 Attribute msDFSR-ConflictSizeInMb

This attribute specifies a value used by the Distributed File System Replication Protocol to control the size of the ConflictAndDeleted directory.

```
cn: ms-DFSR-ConflictSizeInMb
ldapDisplayName: msDFSR-ConflictSizeInMb
attributeId: 1.2.840.113556.1.6.13.3.8
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 9ad33fc9-aacf-4299-bb3e-d1fc6ea88e49
searchFlags: 0
```


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```
rangeLower: 0
rangeUpper: -1
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.149 Attribute msDFSR-ContentSetGuid

This attribute specifies the GUID of a content set in the Distributed File System Replication Protocol.

```
cn: ms-DFSR-ContentSetGuid
ldapDisplayName: msDFSR-ContentSetGuid
attributeId: 1.2.840.113556.1.6.13.3.18
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1035a8e1-67a8-4c21-b7bb-031cdf99d7a0
searchFlags: 0
rangeLower: 16
rangeUpper: 16
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.150 Attribute msDFSR-DefaultCompressionExclusionFilter

This attribute specifies a filter string containing extensions of file types not to be compressed.

```
cn: ms-DFSR-DefaultCompressionExclusionFilter
ldapDisplayName: msDFSR-DefaultCompressionExclusionFilter
attributeId: 1.2.840.113556.1.6.13.3.34
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 87811bd5-cd8b-45cb-9f5d-980f3a9e0c97
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.151 Attribute msDFSR-DeletedPath

This attribute specifies the full path of the Deleted directory.

```
cn: ms-DFSR-DeletedPath
ldapDisplayName: msDFSR-DeletedPath
attributeId: 1.2.840.113556.1.6.13.3.26
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 817cf0b8-db95-4914-b833-5a079ef65764
searchFlags: 0
rangeUpper: 32767
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.152 Attribute msDFSR-DeletedSizeInMb

This attribute specifies the size (in megabytes) of the Deleted directory.

```
cn: ms-DFSR-DeletedSizeInMb
ldapDisplayName: msDFSR-DeletedSizeInMb
attributeId: 1.2.840.113556.1.6.13.3.27
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 53ed9ad1-9975-41f4-83f5-0c061a12553a
searchFlags: 0
rangeUpper: -1
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.153 Attribute msDFSR-DfsLinkTarget

This attribute specifies a value used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-DfsLinkTarget
ldapDisplayName: msDFSR-DfsLinkTarget
attributeId: 1.2.840.113556.1.6.13.3.24
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f7b85ba9-3bf9-428f-aab4-2eee6d56f063
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.154 Attribute msDFSR-DfsPath

This attribute specifies a value used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-DfsPath
ldapDisplayName: msDFSR-DfsPath
attributeId: 1.2.840.113556.1.6.13.3.21
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2cc903e2-398c-443b-ac86-ff6b01eac7ba
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.155 Attribute msDFSR-DirectoryFilter

This attribute specifies a value used by the Distributed File System Replication Protocol for folder name filters.

```
cn: ms-DFSR-DirectoryFilter
ldapDisplayName: msDFSR-DirectoryFilter
attributeId: 1.2.840.113556.1.6.13.3.13
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 93c7b477-1f2e-4b40-b7bf-007e8d038ccf
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.156 Attribute msDFSR-DisablePacketPrivacy

This attribute is reserved for future use.

```
cn: ms-DFSR-DisablePacketPrivacy
ldapDisplayName: msDFSR-DisablePacketPrivacy
attributeId: 1.2.840.113556.1.6.13.3.32
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 6a84ede5-741e-43fd-9dd6-aa0f61578621
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.157 Attribute msDFSR-Enabled

This attribute specifies a value used by the Distributed File System Replication Protocol to identify whether a replicated folder is enabled or disabled.

```
cn: ms-DFSR-Enabled
ldapDisplayName: msDFSR-Enabled
attributeId: 1.2.840.113556.1.6.13.3.9
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 03726ae7-8e7d-4446-8aae-a91657c00993
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.158 Attribute msDFSR-Extension

This attribute is reserved for future use.

```
cn: ms-DFSR-Extension
```


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```
ldapDisplayName: msDFSR-Extension
attributeId: 1.2.840.113556.1.6.13.3.2
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 78f011ec-a766-4b19-adcf-7b81ed781a4d
searchFlags: 0
rangeLower: 0
rangeUpper: 65536
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.159 Attribute msDFSR-FileFilter

This attribute specifies a value used by the Distributed File System Replication Protocol to control file replication.

```
cn: ms-DFSR-FileFilter
ldapDisplayName: msDFSR-FileFilter
attributeId: 1.2.840.113556.1.6.13.3.12
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: d68270ac-a5dc-4841-a6ac-cd68be38c181
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.160 Attribute msDFSR-Flags

This attribute specifies a value used by the Distributed File System Replication Protocol to reflect state.

```
cn: ms-DFSR-Flags
ldapDisplayName: msDFSR-Flags
attributeId: 1.2.840.113556.1.6.13.3.16
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fe515695-3f61-45c8-9bfa-19c148c57b09
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.161 Attribute msDFSR-Keywords

This attribute specifies a value used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-Keywords
ldapDisplayName: msDFSR-Keywords
attributeId: 1.2.840.113556.1.6.13.3.15
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: TRUE
schemaIdGuid: 048b4692-6227-4b67-a074-c4437083e14b
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.162 Attribute msDFSR-MaxAgeInCacheInMin

This attribute is reserved for future use.

```
cn: ms-DFSR-MaxAgeInCacheInMin
ldapDisplayName: msDFSR-MaxAgeInCacheInMin
attributeId: 1.2.840.113556.1.6.13.3.31
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 2ab0e48d-ac4e-4afc-83e5-a34240db6198
searchFlags: 0
rangeUpper: 2147483647
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.163 Attribute msDFSR-MemberReference

This attribute specifies a value used by the Distributed File System Replication Protocol as a forward link to the msDFSR-Member object [MS-ADSC].

```
cn: ms-DFSR-MemberReference
ldapDisplayName: msDFSR-MemberReference
attributeId: 1.2.840.113556.1.6.13.3.100
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 261337aa-f1c3-44b2-bbea-c88d49e6f0c7
searchFlags: 0
linkID: 2052
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.164 Attribute msDFSR-MemberReferenceBL

This attribute is a back link attribute and contains a value used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-MemberReferenceBL
ldapDisplayName: msDFSR-MemberReferenceBL
attributeId: 1.2.840.113556.1.6.13.3.102
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: adde62c6-1880-41ed-bd3c-30b7d25e14f0
```


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```
searchFlags: 0
linkID: 2053
systemFlags: FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.165 Attribute msDFSR-MinDurationCacheInMin

This attribute is reserved for future use.

```
cn: ms-DFSR-MinDurationCacheInMin
ldapDisplayName: msDFSR-MinDurationCacheInMin
attributeId: 1.2.840.113556.1.6.13.3.30
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 4c5d607a-ce49-444a-9862-82a95f5d1fcc
searchFlags: 0
rangeUpper: 2147483647
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.166 Attribute msDFSR-OnDemandExclusionDirectoryFilter

This attribute is reserved for future use.

```
cn: ms-DFSR-OnDemandExclusionDirectoryFilter
ldapDisplayName: msDFSR-OnDemandExclusionDirectoryFilter
attributeId: 1.2.840.113556.1.6.13.3.36
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7d523aff-9012-49b2-9925-f922a0018656
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.167 Attribute msDFSR-OnDemandExclusionFileFilter

This attribute is reserved for future use.

```
cn: ms-DFSR-OnDemandExclusionFileFilter
ldapDisplayName: msDFSR-OnDemandExclusionFileFilter
attributeId: 1.2.840.113556.1.6.13.3.35
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a68359dc-a581-4ee6-9015-5382c60f0fb4
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.168 Attribute msDFSR-Options

This attribute specifies a value used by the Distributed File System Replication Protocol to control optional behavior.

```
cn: ms-DFSR-Options
ldapDisplayName: msDFSR-Options
attributeId: 1.2.840.113556.1.6.13.3.17
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d6d67084-c720-417d-8647-b696237a114c
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.169 Attribute msDFSR-Options2

This attribute is reserved for future use.

```
cn: ms-DFSR-Options2
ldapDisplayName: msDFSR-Options2
attributeId: 1.2.840.113556.1.6.13.3.37
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 11e24318-4ca6-4f49-9afe-e5eb1afa3473
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.170 Attribute msDFSR-Priority

This attribute is reserved for future use.

```
cn: ms-DFSR-Priority
ldapDisplayName: msDFSR-Priority
attributeId: 1.2.840.113556.1.6.13.3.25
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: eb20e7d6-32ad-42de-b141-16ad2631b01b
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.171 Attribute msDFSR-RdcEnabled

This attribute specifies a value used by the Distributed File System Replication Protocol to control the use of Remote Differential Compression [MS-RDC].

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```
cn: ms-DFSR-RdcEnabled
ldapDisplayName: msDFSR-RdcEnabled
attributeId: 1.2.840.113556.1.6.13.3.19
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: e3b44e05-f4a7-4078-a730-f48670a743f8
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.172 Attribute msDFSR-RdcMinFileSizeInKb

This attribute specifies a value used by the Distributed File System Replication Protocol to control the minimum size of files that will then be chunked by Remote Differential Compression [MS-RDC].

```
cn: ms-DFSR-RdcMinFileSizeInKb
ldapDisplayName: msDFSR-RdcMinFileSizeInKb
attributeId: 1.2.840.113556.1.6.13.3.20
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: f402a330-ace5-4dc1-8cc9-74d900bf8ae0
searchFlags: 0
rangeLower: 0
rangeUpper: -1
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.173 Attribute msDFSR-ReadOnly

This attribute specifies whether the content is read-only or read-write.

```
cn: ms-DFSR-ReadOnly
ldapDisplayName: msDFSR-ReadOnly
attributeId: 1.2.840.113556.1.6.13.3.28
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 5ac48021-e447-46e7-9d23-92c0c6a90dfb
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.174 Attribute msDFSR-ReplicationGroupGuid

This attribute specifies a value used by the Distributed File System Replication Protocol to store the replication group GUID.

```
cn: ms-DFSR-ReplicationGroupGuid
ldapDisplayName: msDFSR-ReplicationGroupGuid
attributeId: 1.2.840.113556.1.6.13.3.23
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
```


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```
schemaIdGuid: 2dad8796-7619-4ff8-966e-0a5cc67b287f
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.175 Attribute msDFSR-ReplicationGroupType

This attribute specifies a value used by the Distributed File System Replication Protocol to store the replication group type.

```
cn: ms-DFSR-ReplicationGroupType
ldapDisplayName: msDFSR-ReplicationGroupType
attributeId: 1.2.840.113556.1.6.13.3.10
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: eeed0fc8-1001-45ed-80cc-bbf744930720
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.176 Attribute msDFSR-RootFence

This attribute specifies a value used by the Distributed File System Replication Protocol for the root directory fence value.

```
cn: ms-DFSR-RootFence
ldapDisplayName: msDFSR-RootFence
attributeId: 1.2.840.113556.1.6.13.3.22
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 51928e94-2cd8-4abe-b552-e50412444370
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.177 Attribute msDFSR-RootPath

This attribute specifies a value used by the Distributed File System Replication Protocol for the replicated folder root directory.

```
cn: ms-DFSR-RootPath
ldapDisplayName: msDFSR-RootPath
attributeId: 1.2.840.113556.1.6.13.3.3
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: d7d5e8c1-e61f-464f-9fcf-20bbe0a2ec54
searchFlags: 0
rangeLower: 0
```


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```
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.178 Attribute msDFSR-RootSizeInMb

This attribute specifies a value used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-RootSizeInMb
ldapDisplayName: msDFSR-RootSizeInMb
attributeId: 1.2.840.113556.1.6.13.3.4
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 90b769ac-4413-43cf-ad7a-867142e740a3
searchFlags: 0
rangeLower: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.179 Attribute msDFSR-Schedule

This attribute specifies a value used by the Distributed File System Replication Protocol for replication schedule.

```
cn: ms-DFSR-Schedule
ldapDisplayName: msDFSR-Schedule
attributeId: 1.2.840.113556.1.6.13.3.14
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 4699f15f-a71f-48e2-9ff5-5897c0759205
searchFlags: 0
rangeLower: 336
rangeUpper: 336
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.180 Attribute msDFSR-StagingCleanupTriggerInPercent

This attribute specifies the staging cleanup trigger in percentage of free disk space.

```
cn: ms-DFSR-StagingCleanupTriggerInPercent
ldapDisplayName: msDFSR-StagingCleanupTriggerInPercent
attributeId: 1.2.840.113556.1.6.13.3.40
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d64b9c23-e1fa-467b-b317-6964d744d633
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.181 Attribute msDFSR-StagingPath

This attribute specifies a value used by the Distributed File System Replication Protocol for the replicated folder staging directory.

```
cn: ms-DFSR-StagingPath
ldapDisplayName: msDFSR-StagingPath
attributeId: 1.2.840.113556.1.6.13.3.5
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 86b9a69e-f0a6-405d-99bb-77d977992c2a
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.182 Attribute msDFSR-StagingSizeInMb

This attribute specifies a value used by the Distributed File System Replication Protocol for the staging directory's cleanup quota size.

```
cn: ms-DFSR-StagingSizeInMb
ldapDisplayName: msDFSR-StagingSizeInMb
attributeId: 1.2.840.113556.1.6.13.3.6
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 250a8f20-f6fc-4559-ae65-e4b24c67aebe
searchFlags: 0
rangeLower: 0
rangeUpper: -1
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.183 Attribute msDFSR-TombstoneExpiryInMin

This attribute is reserved for future use.

```
cn: ms-DFSR-TombstoneExpiryInMin
ldapDisplayName: msDFSR-TombstoneExpiryInMin
attributeId: 1.2.840.113556.1.6.13.3.11
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 23e35d4c-e324-4861-a22f-e199140dae00
searchFlags: 0
rangeLower: 0
rangeUpper: 2147483647
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.184 Attribute msDFSR-Version

This attribute specifies a value used by the Distributed File System Replication Protocol.

```
cn: ms-DFSR-Version
ldapDisplayName: msDFSR-Version
attributeId: 1.2.840.113556.1.6.13.3.1
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1a861408-38c3-49ea-ba75-85481a77c655
searchFlags: 0
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.185 Attribute msDNS-DNSKEYRecords

This attribute is written onto dnsZone objects. It is used to store DNS state in BLOB format.

```
cn: ms-DNS-DNSKEY-Records
ldapDisplayName: msDNS-DNSKEYRecords
attributeId: 1.2.840.113556.1.4.2145
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 28c458f5-602d-4ac9-a77c-b3f1be503a7e
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeUpper: 10000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.186 Attribute msDNS-DNSKEYRecordSetTTL

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-DNSKEY-Record-Set-TTL
ldapDisplayName: msDNS-DNSKEYRecordSetTTL
attributeId: 1.2.840.113556.1.4.2139
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8f4e317f-28d7-442c-a6df-1f491f97b326
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 2592000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.187 Attribute msDNS-DSRecordAlgorithms

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-DS-Record-Algorithms
ldapDisplayName: msDNS-DSRecordAlgorithms
attributeId: 1.2.840.113556.1.4.2134
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 5c5b7ad2-20fa-44bb-beb3-34b9c0f65579
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.188 Attribute msDNS-DSRecordSetTTL

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-DS-Record-Set-TTL
ldapDisplayName: msDNS-DSRecordSetTTL
attributeId: 1.2.840.113556.1.4.2140
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 29869b7c-64c4-42fe-97d5-fbc2fa124160
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 2592000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.189 Attribute msDNS-IsSigned

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Is-Signed
ldapDisplayName: msDNS-IsSigned
attributeId: 1.2.840.113556.1.4.2130
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: aa12854c-d8fc-4d5e-91ca-368b8d829bee
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.190 Attribute msDNS-KeymasterZones

This attribute is written onto msDNS-ServerSettings objects. It is used to store DNS state.

```
cn: ms-DNS-Keymaster-Zones
ldapDisplayName: msDNS-KeymasterZones
attributeId: 1.2.840.113556.1.4.2128
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0be0dd3b-041a-418c-ace9-2f17d23e9d42
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.191 Attribute msDNS-MaintainTrustAnchor

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Maintain-Trust-Anchor
ldapDisplayName: msDNS-MaintainTrustAnchor
attributeId: 1.2.840.113556.1.4.2133
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 0dc063c1-52d9-4456-9e15-9c2434aafd94
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.192 Attribute msDNS-NSEC3CurrentSalt

This attribute is written onto dnsZone objects. It is used to store DNS state.

```
cn: ms-DNS-NSEC3-Current-Salt
ldapDisplayName: msDNS-NSEC3CurrentSalt
attributeId: 1.2.840.113556.1.4.2149
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 387d9432-a6d1-4474-82cd-0a89aae084ae
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 510
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.193 Attribute msDNS-NSEC3HashAlgorithm

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-NSEC3-Hash-Algorithm
ldapDisplayName: msDNS-NSEC3HashAlgorithm
attributeId: 1.2.840.113556.1.4.2136
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ff9e5552-7db7-4138-8888-05ce320a0323
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.194 Attribute msDNS-NSEC3Iterations

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-NSEC3-Iterations
ldapDisplayName: msDNS-NSEC3Iterations
attributeId: 1.2.840.113556.1.4.2138
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 80b70aab-8959-4ec0-8e93-126e76df3aca
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 10000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.195 Attribute msDNS-NSEC3OptOut

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-NSEC3-OptOut
ldapDisplayName: msDNS-NSEC3OptOut
attributeId: 1.2.840.113556.1.4.2132
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 7bea2088-8ce2-423c-b191-66ec506b1595
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.196 Attribute msDNS-NSEC3RandomSaltLength

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-NSEC3-Random-Salt-Length
ldapDisplayName: msDNS-NSEC3RandomSaltLength
attributeId: 1.2.840.113556.1.4.2137
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 13361665-916c-4de7-a59d-b1ebbd0de129
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 255
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.197 Attribute msDNS-NSEC3UserSalt

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-NSEC3-User-Salt
ldapDisplayName: msDNS-NSEC3UserSalt
attributeId: 1.2.840.113556.1.4.2148
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: aff16770-9622-4fbc-a128-3088777605b9
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 510
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.198 Attribute msDNS-ParentHasSecureDelegation

This attribute is written onto dnsZone objects. It is used to store DNS state.

```
cn: ms-DNS-Parent-Has-Secure-Delegation
ldapDisplayName: msDNS-ParentHasSecureDelegation
attributeId: 1.2.840.113556.1.4.2146
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 285c6964-c11a-499e-96d8-bf7c75a223c6
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.199 Attribute msDNS-PropagationTime

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Propagation-Time
ldapDisplayName: msDNS-PropagationTime
attributeId: 1.2.840.113556.1.4.2147
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba340d47-2181-4ca0-a2f6-fae4479dab2a
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.200 Attribute msDNS-RFC5011KeyRollovers

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-RFC5011-Key-Rollovers
ldapDisplayName: msDNS-RFC5011KeyRollovers
attributeId: 1.2.840.113556.1.4.2135
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 27d93c40-065a-43c0-bdd8-cdf2c7d120aa
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.201 Attribute msDNS-SecureDelegationPollingPeriod

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Secure-Delegation-Polling-Period
ldapDisplayName: msDNS-SecureDelegationPollingPeriod
attributeId: 1.2.840.113556.1.4.2142
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f6b0f0be-a8e4-4468-8fd9-c3c47b8722f9
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 2592000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.202 Attribute msDNS-SignatureInceptionOffset

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Signature-Inception-Offset
ldapDisplayName: msDNS-SignatureInceptionOffset
attributeId: 1.2.840.113556.1.4.2141
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 03d4c32e-e217-4a61-9699-7bbc4729a026
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 2592000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.203 Attribute msDNS-SigningKeyDescriptors

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Signing-Key-Descriptors
ldapDisplayName: msDNS-SigningKeyDescriptors
attributeId: 1.2.840.113556.1.4.2143
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 3443d8cd-e5b6-4f3b-b098-659a0214a079
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeUpper: 10000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.204 Attribute msDNS-SigningKeys

This attribute is written onto dnsZone objects. It is used to store DNS state.

```
cn: ms-DNS-Signing-Keys
ldapDisplayName: msDNS-SigningKeys
attributeId: 1.2.840.113556.1.4.2144
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: b7673e6d-cad9-4e9e-b31a-63e8098fdd63
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeUpper: 10000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.205 Attribute msDNS-SignWithNSEC3

This attribute is written onto dnsZone objects. It is used to store DNS configuration information.

```
cn: ms-DNS-Sign-With-NSEC3
ldapDisplayName: msDNS-SignWithNSEC3
attributeId: 1.2.840.113556.1.4.2131
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: c79f2199-6da1-46ff-923c-1f3f800c721e
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.206 Attribute msDRM-IdentityCertificate

For a given user object, this attribute specifies the XrML digital rights management (DRM) certificates for the individual represented by that object.

```
cn: MS-DRM-Identity-Certificate
ldapDisplayName: msDRM-IdentityCertificate
attributeId: 1.2.840.113556.1.4.1843
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: e85e1204-3434-41ad-9b56-e2901228fff0
searchFlags: 0
rangeLower: 1
rangeUpper: 10240
systemFlags: FLAG SCHEMA BASE OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.207 Attribute msDS-AdditionalDnsHostName

For a given computer object, this attribute specifies additional fully qualified domain names (FQDNs) (1) ([MS-ADTS] section 1.1) of that computer, as specified in [MS-ADTS] section 3.1.1.

```
cn: ms-DS-Additional-Dns-Host-Name
ldapDisplayName: msDS-AdditionalDnsHostName
attributeId: 1.2.840.113556.1.4.1717
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 80863791-dbe9-4eb8-837e-7f0ab55d9ac7
systemOnly: TRUE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
attributeSecurityGuid: 72e39547-7b18-11d1-adef-00c04fd8d5cd
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.208 Attribute msDS-AdditionalSamAccountName

For a given computer object, this attribute specifies the additional Security Accounts Manager (SAM) account names of that computer. For more information, see [MS-ADTS].

```
cn: ms-DS-Additional-Sam-Account-Name
ldapDisplayName: msDS-AdditionalSamAccountName
attributeId: 1.2.840.113556.1.4.1718
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 975571df-a4d5-429a-9f59-cdc6581d91e6
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE| fANR | fATTINDEX
rangeLower: 0
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.209 Attribute msDS-AllowedDNSSuffixes

For a given Active Directory forest, this attribute specifies the list of DNS suffixes (by their fully qualified domain name (FQDN) (1) ([MS-ADTS] section 1.1)) allowed to be used to identify computers that are members of that forest.

```
cn: ms-DS-Allowed-DNS-Suffixes
ldapDisplayName: msDS-AllowedDNSSuffixes
attributeId: 1.2.840.113556.1.4.1710
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 8469441b-9ac4-4e45-8205-bd219dbf672d
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.210 Attribute msDS-AllowedToActOnBehalfOfOtherIdentity

This attribute is used for access checks to determine if a requestor has permission to act on the behalf of other identities to services running as this account.

```
cn: ms-DS-Allowed-To-Act-On-Behalf-Of-Other-Identity
ldapDisplayName: msDS-AllowedToActOnBehalfOfOtherIdentity
attributeId: 1.2.840.113556.1.4.2182
attributeSyntax: 2.5.5.15
omSyntax: 66
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
rangeLower: 0
rangeUpper: 132096
schemaIdGuid: 3f78c3e5-f79a-46bd-a0b8-9d18116ddc79
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.211 Attribute msDS-AllowedToDelegateTo

For a given computer or user account, this attribute specifies the list of service principal names (SPN) corresponding to Windows services that can act on behalf of the computer or user account.

```
cn: ms-DS-Allowed-To-Delegate-To
ldapDisplayName: msDS-AllowedToDelegateTo
attributeId: 1.2.840.113556.1.4.1787
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 800d94d7-b7a1-42a1-b14d-7cae1423d07f
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.212 Attribute msDS-AllUsersTrustQuota

For a given Active Directory forest, this attribute specifies the maximum number of trusted domain objects (TDOs) allowed. For more information on the use of this attribute, see [MS-LSAD].

```
cn: MS-DS-All-Users-Trust-Quota
ldapDisplayName: msDS-AllUsersTrustQuota
attributeId: 1.2.840.113556.1.4.1789
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d3aa4a5c-4e03-4810-97aa-2b339e7a434b
systemOnly: FALSE
```


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```
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.213 Attribute msDS-AppliesToResourceTypes

For a resource property, this attribute indicates what resource types this resource property applies to.

```
cn: ms-DS-Applies-To-Resource-Types
ldapDisplayName: msDS-AppliesToResourceTypes
attributeId: 1.2.840.113556.1.4.2195
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 693f2006-5764-3d4a-8439-58f04aab4b59
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.214 Attribute msDS-Approx-Immed-Subordinates

For a given object in the directory, this attribute specifies the approximate number of direct descendants. For more information, see [MS-ADTS] section 3.1.1.4.5.15.

```
cn: ms-DS-Approx-Immed-Subordinates
ldapDisplayName: msDS-Approx-Immed-Subordinates
attributeId: 1.2.840.113556.1.4.1669
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: e185d243-f6ce-4adb-b496-b0c005d7823c
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.215 Attribute msDS-ApproximateLastLogonTimeStamp

This attribute specifies the approximate time a user last logged on from the device.

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```
cn: ms-DS-Approximate-Last-Logon-Time-Stamp
ldapDisplayName: msDS-ApproximateLastLogonTimeStamp
attributeId: 1.2.840.113556.1.4.2262
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: a34f983b-84c6-4f0c-9050-a3a14a1d35a4
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.216 Attribute msDS-AssignedAuthNPolicy

This attribute specifies which AuthNPolicy is applied to this principal.

```
cn: ms-DS-Assigned-AuthN-Policy
ldapDisplayName: msDS-AssignedAuthNPolicy
attributeId: 1.2.840.113556.1.4.2295
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: TRUE
schemaIdGuid: b87a0ad8-54f7-49c1-84a0-e64d12853588
systemOnly: FALSE
searchFlags: 0
linkID: 2212
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.217 Attribute msDS-AssignedAuthNPolicyBL

This attribute is the backlink for msDS-AssignedAuthNPolicy.

```
cn: ms-DS-Assigned-AuthN-Policy-BL
ldapDisplayName: msDS-AssignedAuthNPolicyBL
attributeId: 1.2.840.113556.1.4.2296
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 2d131b3c-d39f-4aee-815e-8db4bc1ce7ac
systemOnly: TRUE
searchFlags: 0
linkID: 2213
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.218 Attribute msDS-AssignedAuthNPolicySilo

This attribute specifies the AuthNPolicySilo that a principal is assigned to.

```
cn: ms-DS-Assigned-AuthN-Policy-Silo
ldapDisplayName: msDS-AssignedAuthNPolicySilo
```


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```
attributeId: 1.2.840.113556.1.4.2285
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b23fc141-0df5-4aea-b33d-6cf493077b3f
systemOnly: FALSE
searchFlags: 0
linkID: 2202
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.219 Attribute msDS-AssignedAuthNPolicySiloBL

This attribute is the backlink for msDS-AssignedAuthNPolicySilo.

```
cn: ms-DS-Assigned-AuthN-Policy-Silo-BL
ldapDisplayName: msDS-AssignedAuthNPolicySiloBL
attributeId: 1.2.840.113556.1.4.2286
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 33140514-f57a-47d2-8ec4-04c4666600c7
systemOnly: TRUE
searchFlags: 0
linkID: 2203
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.220 Attribute msDS-AuthenticatedAtDC

This attribute specifies the forward link for ms-DS-AuthenticatedTo-Accountlist. For a user, it identifies which DC a user has authenticated to.

```
cn: ms-DS-AuthenticatedAt-DC
ldapDisplayName: msDS-AuthenticatedAtDC
attributeId: 1.2.840.113556.1.4.1958
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 3e1ee99c-6604-4489-89d9-84798a89515a
systemOnly: FALSE
searchFlags: 0
linkID: 2112
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.221 Attribute msDS-AuthenticatedToAccountlist

This attribute specifies the back link for ms-DS-AuthenticatedAt-DC. For a computer, it identifies which users have authenticated to this computer.

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```
cn: ms-DS-AuthenticatedTo-Accountlist
ldapDisplayName: msDS-AuthenticatedToAccountlist
attributeId: 1.2.840.113556.1.4.1957
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: e8b2c971-a6df-47bc-8d6f-62770d527aa5
systemOnly: TRUE
searchFlags: 0
linkID: 2113
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.222 Attribute msDS-AuthNPolicyEnforced

This attribute specifies whether the authentication policy is enforced.

```
cn: ms-DS-AuthN-Policy-Enforced
ldapDisplayName: msDS-AuthNPolicyEnforced
attributeId: 1.2.840.113556.1.4.2297
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 7a560cc2-ec45-44ba-b2d7-21236ad59fd5
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.223 Attribute msDS-AuthNPolicySiloEnforced

This attribute specifies whether the authentication policy silo is enforced.

```
cn: ms-DS-AuthN-Policy-Silo-Enforced
ldapDisplayName: msDS-AuthNPolicySiloEnforced
attributeId: 1.2.840.113556.1.4.2298
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: f2f51102-6be0-493d-8726-1546cdbc8771
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.224 Attribute msDS-AuthNPolicySiloMembers

This attribute specifies which principals are assigned to the AuthNPolicySilo object.

```
cn: ms-DS-AuthN-Policy-Silo-Members
ldapDisplayName: msDS-AuthNPolicySiloMembers
attributeId: 1.2.840.113556.1.4.2287
```


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```
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 164d1e05-48a6-4886-a8e9-77a2006e3c77
systemOnly: FALSE
searchFlags: 0
linkID: 2204
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.225 Attribute msDS-AuthNPolicySiloMembersBL

This attribute is the backlink for msDS-AuthNPolicySiloMembers.

```
cn: ms-DS-AuthN-Policy-Silo-Members-BL
ldapDisplayName: msDS-AuthNPolicySiloMembersBL
attributeId: 1.2.840.113556.1.4.2288
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 11fccbc7-fbe4-4951-b4b7-addf6f9efd44
systemOnly: TRUE
searchFlags: 0
linkID: 2205
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.226 Attribute msDS-Auxiliary-Classes

For a given object, this attribute specifies the list of auxiliary classes that have been dynamically attached to an object. For more information, see [MS-ADTS] section 3.1.1.2.

```
cn: ms-DS-Auxiliary-Classes
ldapDisplayName: msDS-Auxiliary-Classes
attributeId: 1.2.840.113556.1.4.1458
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: c4af1073-ee50-4be0-b8c0-89a41fe99abe
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.227 Attribute msDS-AzApplicationData

This attribute specifies a string that is used by individual applications to store needed information.

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```
cn: ms-DS-Az-Application-Data
ldapDisplayName: msDS-AzApplicationData
attributeId: 1.2.840.113556.1.4.1819
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 503fc3e8-1cc6-461a-99a3-9eee04f402a7
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.228 Attribute msDS-AzApplicationName

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Application-Name
ldapDisplayName: msDS-AzApplicationName
attributeId: 1.2.840.113556.1.4.1798
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: db5b0728-6208-4876-83b7-95d3e5695275
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 512
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.229 Attribute msDS-AzApplicationVersion

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Application-Version
ldapDisplayName: msDS-AzApplicationVersion
attributeId: 1.2.840.113556.1.4.1817
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7184a120-3ac4-47ae-848f-fe0ab20784d4
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.230 Attribute msDS-AzBizRule

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Biz-Rule
ldapDisplayName: msDS-AzBizRule
attributeId: 1.2.840.113556.1.4.1801
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 33d41ea8-c0c9-4c92-9494-f104878413fd
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.231 Attribute msDS-AzBizRuleLanguage

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Biz-Rule-Language
ldapDisplayName: msDS-AzBizRuleLanguage
attributeId: 1.2.840.113556.1.4.1802
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 52994b56-0e6c-4e07-aa5c-ef9d7f5a0e25
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 64
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.232 Attribute msDS-AzClassId

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Class-ID
ldapDisplayName: msDS-AzClassId
attributeId: 1.2.840.113556.1.4.1816
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 013a7277-5c2d-49ef-a7de-b765b36a3f6f
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 40
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.233 Attribute msDS-AzDomainTimeout

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Domain-Timeout
ldapDisplayName: msDS-AzDomainTimeout
attributeId: 1.2.840.113556.1.4.1795
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 6448f56a-ca70-4e2e-b0af-d20e4ce653d0
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.234 Attribute msDS-AzGenerateAudits

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Generate-Audits
ldapDisplayName: msDS-AzGenerateAudits
attributeId: 1.2.840.113556.1.4.1805
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: f90abab0-186c-4418-bb85-88447c87222a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.235 Attribute msDS-AzGenericData

This attribute specifies AzMan-specific generic data.

```
cn: ms-DS-Az-Generic-Data
ldapDisplayName: msDS-AzGenericData
attributeId: 1.2.840.113556.1.4.1950
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
```


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```
schemaIdGuid: b5f7e349-7a5b-407c-a334-a31c3f538b98
systemOnly: FALSE
searchFlags: 0
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.236 Attribute msDS-AzLastImportedBizRulePath

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Last-Imported-Biz-Rule-Path
ldapDisplayName: msDS-AzLastImportedBizRulePath
attributeId: 1.2.840.113556.1.4.1803
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 665acb5c-bb92-4dbc-8c59-b3638eab09b3
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.237 Attribute msDS-AzLDAPQuery

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-LDAP-Query
ldapDisplayName: msDS-AzLDAPQuery
attributeId: 1.2.840.113556.1.4.1792
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5e53368b-fc94-45c8-9d7d-daf31ee7112d
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 4096
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.238 Attribute msDS-AzMajorVersion

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Major-Version
ldapDisplayName: msDS-AzMajorVersion
attributeId: 1.2.840.113556.1.4.1824
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: cfb9adb7-c4b7-4059-9568-1ed9db6b7248
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.239 Attribute msDS-AzMinorVersion

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Minor-Version
ldapDisplayName: msDS-AzMinorVersion
attributeId: 1.2.840.113556.1.4.1825
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ee85ed93-b209-4788-8165-e702f51bfbf3
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.240 Attribute msDS-AzObjectGuid

This attribute specifies the unique and portable identifier of AzMan objects.

```
cn: ms-DS-Az-Object-Guid
ldapDisplayName: msDS-AzObjectGuid
attributeId: 1.2.840.113556.1.4.1949
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 8491e548-6c38-4365-a732-af041569b02c
systemOnly: TRUE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.241 Attribute msDS-AzOperationID

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Operation-ID
ldapDisplayName: msDS-AzOperationID
attributeId: 1.2.840.113556.1.4.1800
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: a5f3b553-5d76-4cbe-ba3f-4312152cab18
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.242 Attribute msDS-AzScopeName

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Scope-Name
ldapDisplayName: msDS-AzScopeName
attributeId: 1.2.840.113556.1.4.1799
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 515a6b06-2617-4173-8099-d5605df043c6
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.243 Attribute msDS-AzScriptEngineCacheMax

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Script-Engine-Cache-Max
ldapDisplayName: msDS-AzScriptEngineCacheMax
attributeId: 1.2.840.113556.1.4.1796
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 2629f66a-1f95-4bf3-a296-8e9d7b9e30c8
systemOnly: FALSE
```


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```
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.244 Attribute msDS-AzScriptTimeout

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Script-Timeout
ldapDisplayName: msDS-AzScriptTimeout
attributeId: 1.2.840.113556.1.4.1797
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 87d0fb41-2c8b-41f6-b972-11fdfd50d6b0
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.245 Attribute msDS-AzTaskIsRoleDefinition

This attribute is used by applications that leverage Active Directory for authentication and authorization.

```
cn: ms-DS-Az-Task-Is-Role-Definition
ldapDisplayName: msDS-AzTaskIsRoleDefinition
attributeId: 1.2.840.113556.1.4.1818
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 7b078544-6c82-4fe9-872f-ff48ad2b2e26
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.246 Attribute msDS-Behavior-Version

For a given Active Directory domain or forest, this attribute specifies the domain or forest behavior version. It is a monotonically increasing number that is used to enable certain Active Directory features.

```
cn: ms-DS-Behavior-Version
ldapDisplayName: msDS-Behavior-Version
```


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```
attributeId: 1.2.840.113556.1.4.1459
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d31a8757-2447-4545-8081-3bb610cacbf2
systemOnly: TRUE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.247 Attribute msDS-BridgeHeadServersUsed

This attribute specifies the list of bridge head servers used by the KCC in the previous run.

```
cn: ms-DS-BridgeHead-Servers-Used
ldapDisplayName: msDS-BridgeHeadServersUsed
attributeId: 1.2.840.113556.1.4.2049
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
linkID: 2160
isSingleValued: FALSE
showInAdvancedViewOnly: TRUE
schemaIdGuid: 3ced1465-7b71-2541-8780-1e1ea6243a82
searchFlags: 0
systemFlags: FLAG ATTR NOT REPLICATED | FLAG ATTR IS OPERATIONAL |
 FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.248 Attribute msDS-ByteArray

This attribute specifies binary data for a given object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Byte-Array
ldapDisplayName: msDS-ByteArray
attributeId: 1.2.840.113556.1.4.1831
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: f0d8972e-dd5b-40e5-a51d-044c7c17ece7
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1000000
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.249 Attribute msDS-Cached-Membership

This attribute specifies a membership of cached groups and is used during group expansion. For more information, see [MS-SAMR].

```
cn: ms-DS-Cached-Membership
ldapDisplayName: msDS-Cached-Membership
attributeId: 1.2.840.113556.1.4.1441
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 69cab008-cdd4-4bc9-bab8-0ff37efe1b20
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.250 Attribute msDS-Cached-Membership-Time-Stamp

This attribute specifies the time stamp of cached groups and is used during group expansion. For more information, see [MS-SAMR].

```
cn: ms-DS-Cached-Membership-Time-Stamp
ldapDisplayName: msDS-Cached-Membership-Time-Stamp
attributeId: 1.2.840.113556.1.4.1442
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 3566bf1f-beee-4dcb-8abe-ef89fcfec6c1
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.251 Attribute msDS-ClaimAttributeSource

For a claim type object, this attribute points to the attribute that will be used as the source for the claim type.

```
cn: ms-DS-Claim-Attribute-Source
ldapDisplayName: msDS-ClaimAttributeSource
attributeId: 1.2.840.113556.1.4.2099
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
```


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```
schemaIdGuid: eebc123e-bae6-4166-9e5b-29884a8b76b0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.252 Attribute msDS-ClaimIsSingleValued

For a claim type object, this attribute identifies whether the claim type or resource property can contain only a single value.

```
cn: ms-DS-Claim-Is-Single-Valued
ldapDisplayName: msDS-ClaimIsSingleValued
attributeId: 1.2.840.113556.1.4.2160
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
schemaIdGuid: cd789fb9-96b4-4648-8219-ca378161af38
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.253 Attribute msDS-ClaimIsValueSpaceRestricted

For a claim type, this attribute identifies whether a user can enter values in applications other than those described for the msDS-ClaimPossibleValues attribute.

```
cn: ms-DS-Claim-Is-Value-Space-Restricted
ldapDisplayName: msDS-ClaimIsValueSpaceRestricted
attributeId: 1.2.840.113556.1.4.2159
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 0c2ce4c7-f1c3-4482-8578-c60d4bb74422
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.254 Attribute msDS-ClaimPossibleValues

For a claim type or resource property object, this attribute describes the values suggested to a user when he or she uses the claim type or resource property in applications.

```
cn: ms-DS-Claim-Possible-Values
ldapDisplayName: msDS-ClaimPossibleValues
attributeId: 1.2.840.113556.1.4.2097
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
```


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```
rangeUpper: 1048576
schemaIdGuid: 2e28edee-ed7c-453f-afe4-93bd86f2174f
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.255 Attribute msDS-ClaimSharesPossibleValuesWith

For a claim type object, this attribute indicates that the possible values of the claims issued are defined on the object that this linked attribute points to. If populated, this attribute overrides msDS-ClaimPossibleValues, msDS-ClaimValueType, and msDS-ClaimIsValueSpaceRestricted.

```
cn: ms-DS-Claim-Shares-Possible-Values-With
ldapDisplayName: msDS-ClaimSharesPossibleValuesWith
attributeId: 1.2.840.113556.1.4.2101
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 52c8d13a-ce0b-4f57-892b-18f5a43a2400
linkID: 2178
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.256 Attribute msDS-ClaimSharesPossibleValuesWithBL

For a claim type object, this attribute indicates that the possible values described in msDS-ClaimPossibleValues are being referenced by other claim type objects.

```
cn: ms-DS-Claim-Shares-Possible-Values-With-BL
ldapDisplayName: msDS-ClaimSharesPossibleValuesWithBL
attributeId: 1.2.840.113556.1.4.2102
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 54d522db-ec95-48f5-9bbd-1880ebbb2180
linkID: 2179
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.257 Attribute msDS-ClaimSource

For a claim type, this attribute indicates the source of the claim type. For example, the source can be a certificate.

```
cn: ms-DS-Claim-Source
ldapDisplayName: msDS-ClaimSource
```


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```
attributeId: 1.2.840.113556.1.4.2157
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: fa32f2a6-f28b-47d0-bf91-663e8f910a72
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.258 Attribute msDS-ClaimSourceType

For a security principal claim type, this attribute lists the type of store the issued claim is sourced from.

```
cn: ms-DS-Claim-Source-Type
ldapDisplayName: msDS-ClaimSourceType
attributeId: 1.2.840.113556.1.4.2158
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 92f19c05-8dfa-4222-bbd1-2c4f01487754
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.259 Attribute msDS-ClaimTypeAppliesToClass

For a claim type object, this linked attribute points to the Active Directory security principal classes for which claims are issued (for example, a link to the user class).

```
cn: ms-DS-Claim-Type-Applies-To-Class
ldapDisplayName: msDS-ClaimTypeAppliesToClass
attributeId: 1.2.840.113556.1.4.2100
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 6afb0e4c-d876-437c-aeb6-c3e41454c272
linkID: 2176
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.260 Attribute msDS-ClaimValueType

For a claim type object, this attribute specifies the value type of the claims issued.

```
cn: ms-DS-Claim-Value-Type
ldapDisplayName: msDS-ClaimValueType
```


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```
attributeId: 1.2.840.113556.1.4.2098
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
schemaIdGuid: c66217b9-e48e-47f7-b7d5-6552b8afd619
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.261 Attribute msDS-CloudAnchor

This attribute is used by the DirSync engine to specify the object start of authority and to maintain the relationship between on-premises and cloud objects.

```
cn: ms-DS-Cloud-Anchor
ldapDisplayName: msDS-CloudAnchor
attributeId: 1.2.840.113556.1.4.2273
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 78565e80-03d4-4fe3-afac-8c3bca2f3653
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.262 Attribute msDS-cloudExtensionAttribute1

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute1
lDAPDisplayName: msDS-cloudExtensionAttribute1
attributeID: 1.2.840.113556.1.4.2214
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 9709eaaf-49da-4db2-908a-0446e5eab844
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.263 Attribute msDS-cloudExtensionAttribute2

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute2
lDAPDisplayName: msDS-cloudExtensionAttribute2
attributeID: 1.2.840.113556.1.4.2215
```


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```
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: f34ee0ac-c0c1-4ba9-82c9-1a90752f16a5
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.264 Attribute msDS-cloudExtensionAttribute3

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute3
lDAPDisplayName: msDS-cloudExtensionAttribute3
attributeID: 1.2.840.113556.1.4.2216
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 82f6c81a-fada-4a0d-b0f7-706d46838eb5
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.265 Attribute msDS-cloudExtensionAttribute4

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute4
lDAPDisplayName: msDS-cloudExtensionAttribute4
attributeID: 1.2.840.113556.1.4.2217
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 9cbf3437-4e6e-485b-b291-22b02554273f
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.266 Attribute msDS-cloudExtensionAttribute5

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute5
```


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```
lDAPDisplayName: msDS-cloudExtensionAttribute5
attributeID: 1.2.840.113556.1.4.2218
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 2915e85b-e347-4852-aabb-22e5a651c864
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.267 Attribute msDS-cloudExtensionAttribute6

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute6
lDAPDisplayName: msDS-cloudExtensionAttribute6
attributeID: 1.2.840.113556.1.4.2219
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 60452679-28e1-4bec-ace3-712833361456
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.268 Attribute msDS-cloudExtensionAttribute7

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute7
lDAPDisplayName: msDS-cloudExtensionAttribute7
attributeID: 1.2.840.113556.1.4.2220
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 4a7c1319-e34e-40c2-9d00-60ff7890f207
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.269 Attribute msDS-cloudExtensionAttribute8

This attribute contains an arbitrary, cloud-relevant string.

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```
cn: ms-DS-cloudExtensionAttribute8
lDAPDisplayName: msDS-cloudExtensionAttribute8
attributeID: 1.2.840.113556.1.4.2221
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 3cd1c514-8449-44ca-81c0-021781800d2a
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.270 Attribute msDS-cloudExtensionAttribute9

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute9
lDAPDisplayName: msDS-cloudExtensionAttribute9
attributeID: 1.2.840.113556.1.4.2222
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 0a63e12c-3040-4441-ae26-cd95af0d247e
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.271 Attribute msDS-cloudExtensionAttribute10

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute10
lDAPDisplayName: msDS-cloudExtensionAttribute10
attributeID: 1.2.840.113556.1.4.2223
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 670afcb3-13bd-47fc-90b3-0a527ed81ab7
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.272 Attribute msDS-cloudExtensionAttribute11

This attribute contains an arbitrary, cloud-relevant string.

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```
cn: ms-DS-cloudExtensionAttribute11
lDAPDisplayName: msDS-cloudExtensionAttribute11
attributeID: 1.2.840.113556.1.4.2224
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 9e9ebbc8-7da5-42a6-8925-244e12a56e24
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.273 Attribute msDS-cloudExtensionAttribute12

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute12
lDAPDisplayName: msDS-cloudExtensionAttribute12
attributeID: 1.2.840.113556.1.4.2225
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 3c01c43d-e10b-4fca-92b2-4cf615d5b09a
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.274 Attribute msDS-cloudExtensionAttribute13

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute13
lDAPDisplayName: msDS-cloudExtensionAttribute13
attributeID: 1.2.840.113556.1.4.2226
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 28be464b-ab90-4b79-a6b0-df437431d036
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.275 Attribute msDS-cloudExtensionAttribute14

This attribute contains an arbitrary, cloud-relevant string.

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```
cn: ms-DS-cloudExtensionAttribute14
lDAPDisplayName: msDS-cloudExtensionAttribute14
attributeID: 1.2.840.113556.1.4.2227
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: cebcb6ba-6e80-4927-8560-98feca086a9f
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.276 Attribute msDS-cloudExtensionAttribute15

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute15
lDAPDisplayName: msDS-cloudExtensionAttribute15
attributeID: 1.2.840.113556.1.4.2228
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: aae4d537-8af0-4daa-9cc6-62eadb84ff03
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.277 Attribute msDS-cloudExtensionAttribute16

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute16
lDAPDisplayName: msDS-cloudExtensionAttribute16
attributeID: 1.2.840.113556.1.4.2229
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 9581215b-5196-4053-a11e-6ffcafc62c4d
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.278 Attribute msDS-cloudExtensionAttribute17

This attribute contains an arbitrary, cloud-relevant string.

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```
cn: ms-DS-cloudExtensionAttribute17
lDAPDisplayName: msDS-cloudExtensionAttribute17
attributeID: 1.2.840.113556.1.4.2230
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 3d3c6dda-6be8-4229-967e-2ff5bb93b4ce
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.279 Attribute msDS-cloudExtensionAttribute18

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute18
lDAPDisplayName: msDS-cloudExtensionAttribute18
attributeID: 1.2.840.113556.1.4.2231
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 88e73b34-0aa6-4469-9842-6eb01b32a5b5
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.280 Attribute msDS-cloudExtensionAttribute19

This attribute contains an arbitrary, cloud-relevant string.

```
cn: ms-DS-cloudExtensionAttribute19
lDAPDisplayName: msDS-cloudExtensionAttribute19
attributeID: 1.2.840.113556.1.4.2232
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: 0975fe99-9607-468a-8e18-c800d3387395
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.281 Attribute msDS-cloudExtensionAttribute20

This attribute contains an arbitrary, cloud-relevant string.

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```
cn: ms-DS-cloudExtensionAttribute20
lDAPDisplayName: msDS-cloudExtensionAttribute20
attributeID: 1.2.840.113556.1.4.2233
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
schemaIDGUID: f5446328-8b6e-498d-95a8-211748d5acdc
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.282 Attribute msDS-CloudIsEnabled

This attribute is used to indicate whether the cloud device registration service is enabled.

```
cn: ms-DS-Cloud-IsEnabled
ldapDisplayName: msDS-CloudIsEnabled
attributeId: 1.2.840.113556.1.4.2275
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 89848328-7c4e-4f6f-a013-28ce3ad282dc
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.283 Attribute msDS-CloudIsManaged

This attribute is used to indicate that the device is managed by a cloud mobile device manager.

```
cn: ms-DS-Cloud-IsManaged
ldapDisplayName: msDS-CloudIsManaged
attributeId: 1.2.840.113556.1.4.2271
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 5315ba8e-958f-4b52-bd38-1349a304dd63
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.284 Attribute msDS-CloudIssuerPublicCertificates

This attribute specifies the public keys used by the cloud device registration service to sign certificates that have been issued by the registration service.

```
cn: ms-DS-Cloud-Issuer-Public-Certificates
```


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```
ldapDisplayName: msDS-CloudIssuerPublicCertificates
attributeId: 1.2.840.113556.1.4.2274
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: a1e8b54f-4bd6-4fd2-98e2-bcee92a55497
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 65536
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.285 Attribute msDS-ComputerAllowedToAuthenticateTo

This attribute is used to determine whether a computer has permission to authenticate to a service.

```
cn: ms-DS-Computer-Allowed-To-Authenticate-To
ldapDisplayName: msDS-ComputerAllowedToAuthenticateTo
attributeId: 1.2.840.113556.1.4.2280
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 105babe9-077e-4793-b974-ef0410b62573
systemOnly: FALSE
searchFlags: 0
RangeLower: 0
RangeUpper: 132096
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.286 Attribute msDS-ComputerAuthNPolicy

This attribute specifies which AuthNPolicy is applied to computers assigned to this silo object.

```
cn: ms-DS-Computer-AuthN-Policy
ldapDisplayName: msDS-ComputerAuthNPolicy
attributeId: 1.2.840.113556.1.4.2291
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: TRUE
schemaIdGuid: afb863c9-bea3-440f-a9f3-6153cc668929
systemOnly: FALSE
searchFlags: 0
linkID: 2208
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.287 Attribute msDS-ComputerAuthNPolicyBL

This attribute is the backlink for msDS-ComputerAuthNPolicy.

```
cn: ms-DS-Computer-AuthN-Policy-BL
ldapDisplayName: msDS-ComputerAuthNPolicyBL
```


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```
attributeId: 1.2.840.113556.1.4.2292
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 2bef6232-30a1-457e-8604-7af6dbf131b8
systemOnly: TRUE
searchFlags: 0
linkID: 2209
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.288 Attribute msDS-ComputerSID

This attribute identifies a domain-joined computer.

```
cn: ms-DS-Computer-SID
ldapDisplayName: msDS-ComputerSID
attributeId: 1.2.840.113556.1.4.2321
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: dffbd720-0872-402e-9940-fcd78db049ba
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.289 Attribute msDS-ComputerTGTLifetime

This attribute specifies the maximum age of a Kerberos TGT issued to a computer in units of 10^(-7) seconds.

```
cn: ms-DS-Computer-TGT-Lifetime
ldapDisplayName: msDS-ComputerTGTLifetime
attributeId: 1.2.840.113556.1.4.2281
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 2e937524-dfb9-4cac-a436-a5b7da64fd66
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.290 Attribute msDS-CustomKeyInformation

This attribute contains additional information about the key.

```
cn: ms-DS-Custom-Key-Information
ldapDisplayName: msDS-CustomKeyInformation
attributeId: 1.2.840.113556.1.4.2322
attributeSyntax: 2.5.5.10
omSyntax: 4
```


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```
isSingleValued: TRUE
schemaIdGuid: b6e5e988-e5e4-4c86-a2ae-0dacb970a0e1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
RangeLower: 0
RangeUpper: 132096
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.291 Attribute msDS-DateTime

This attribute specifies the date and time for a given object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Date-Time
ldapDisplayName: msDS-DateTime
attributeId: 1.2.840.113556.1.4.1832
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: FALSE
schemaIdGuid: 234fcbd8-fb52-4908-a328-fd9f6e58e403
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.292 Attribute msDS-DefaultQuota

This attribute specifies the default object creation quota for a given security principle. For more information, see [MS-ADTS] section 6.1.1.4.

```
cn: ms-DS-Default-Quota
ldapDisplayName: msDS-DefaultQuota
attributeId: 1.2.840.113556.1.4.1846
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 6818f726-674b-441b-8a3a-f40596374cea
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.293 Attribute msDS-DeletedObjectLifetime

This attribute specifies the lifetime of deleted objects.

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```
cn: ms-DS-Deleted-Object-Lifetime
ldapDisplayName: msDS-DeletedObjectLifetime
attributeId: 1.2.840.113556.1.4.2068
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: TRUE
schemaIdGuid: a9b38cb6-189a-4def-8a70-0fcfa158148e
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.294 Attribute msDS-DeviceDN

This attribute identifies the registered device from which this key object was provisioned.

```
cn: ms-DS-Device-DN
ldapDisplayName: msDS-DeviceDN
attributeId: 1.2.840.113556.1.4.2320
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 642c1129-3899-4721-8e21-4839e3988ce5
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.295 Attribute msDS-DeviceID

This attribute stores the ID of the device.

```
cn: ms-DS-Device-ID
ldapDisplayName: msDS-DeviceID
attributeId: 1.2.840.113556.1.4.2252
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: c30181c7-6342-41fb-b279-f7c566cbe0a7
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.296 Attribute msDS-DeviceLocation

This attribute specifies the DN under which the device objects will be created.

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```
cn: ms-DS-Device-Location
ldapDisplayName: msDS-DeviceLocation
attributeId: 1.2.840.113556.1.4.2261
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: e3fb56c8-5de8-45f5-b1b1-d2b6cd31e762
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.297 Attribute msDS-DeviceMDMStatus

This attribute is used to manage the mobile device management status of the device.

```
cn: ms-DS-Device-MDMStatus
ldapDisplayName: msDS-DeviceMDMStatus
attributeId: 1.2.840.113556.1.4.2308
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
rangeUpper: 256
schemaIdGuid: f60a8f96-57c4-422c-a3ad-9e2fa09ce6f7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.298 Attribute msDS-DeviceObjectVersion

This attribute is used to identify the schema version of the device.

```
cn: ms-DS-Device-Object-Version
ldapDisplayName: msDS-DeviceObjectVersion
attributeId: 1.2.840.113556.1.4.2257
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ef65695a-f179-4e6a-93de-b01e06681cfb
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.299 Attribute msDS-DeviceOSType

This attribute is used to track the type of device based on the operating system.

```
cn: ms-DS-Device-OS-Type
ldapDisplayName: msDS-DeviceOSType
```


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```
attributeId: 1.2.840.113556.1.4.2249
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 100e454d-f3bb-4dcb-845f-8d5edc471c59
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.300 Attribute msDS-DeviceOSVersion

This attribute is used to track the operating system version of the device.

```
cn: ms-DS-Device-OS-Version
ldapDisplayName: msDS-DeviceOSVersion
attributeId: 1.2.840.113556.1.4.2250
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 70fb8c63-5fab-4504-ab9d-14b329a8a7f8
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 512
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.301 Attribute msDS-DevicePhysicalIDs

This attribute is used to store identifiers of the physical device.

```
cn: ms-DS-Device-Physical-IDs
ldapDisplayName: msDS-DevicePhysicalIDs
attributeId: 1.2.840.113556.1.4.2251
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 90615414-a2a0-4447-a993-53409599b74e
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

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2.302 Attribute msDS-DeviceTrustType

This attribute represents the join type for devices.

```
cn: ms-DS-Device-Trust-Type
ldapDisplayName: msDS-DeviceTrustType
attributeId: 1.2.840.113556.1.4.2325
oMSyntax: 2
attributeSyntax: 2.5.5.9
isSingleValued: TRUE
schemaIDGUID: c4a46807-6adc-4bbb-97de-6bed181a1bfe
searchFlags: 0
systemOnly: FALSE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.303 Attribute msDS-DnsRootAlias

This attribute specifies the additional fully qualified domain names (FQDNs) (1) ([MS-ADTS] section 1.1) for a given application naming context (NC).

```
cn: ms-DS-DnsRootAlias
ldapDisplayName: msDS-DnsRootAlias
attributeId: 1.2.840.113556.1.4.1719
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2143acca-eead-4d29-b591-85fa49ce9173
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 255
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.304 Attribute msDS-EgressClaimsTransformationPolicy

This attribute is a link to a claims transformation policy object for the egress claims (that is, claims leaving this forest) to the Trusted Domain. This attribute is applicable only for an incoming or bidirectional cross-forest trust. When this link is not present, all claims are allowed to egress as is.

```
cn: ms-DS-Egress-Claims-Transformation-Policy
ldapDisplayName: msDS-EgressClaimsTransformationPolicy
attributeId: 1.2.840.113556.1.4.2192
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: c137427e-9a73-b040-9190-1b095bb43288
```


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```
linkID: 2192
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.305 Attribute msDS-EnabledFeature

This attribute lists the enabled optional features.

```
cn: ms-DS-Enabled-Feature
ldapDisplayName: msDS-EnabledFeature
attributeId: 1.2.840.113556.1.4.2061
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
linkId: 2168
isSingleValued: FALSE
schemaIdGuid: 5706aeaf-b940-4fb2-bcfc-5268683ad9fe
isMemberOfPartialAttributeSet: TRUE
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.306 Attribute msDS-EnabledFeatureBL

This attribute is the back link attribute of msDS-EnabledFeature, and it lists the scopes where an optional feature is enabled.

```
cn: ms-DS-Enabled-Feature-BL
ldapDisplayName: msDS-EnabledFeatureBL
attributeId: 1.2.840.113556.1.4.2069
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
linkId: 2169
isSingleValued: FALSE
schemaIdGuid: ce5b01bc-17c6-44b8-9dc1-a9668b00901b
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.307 Attribute msDS-Entry-Time-To-Die

This attribute specifies the absolute expiration time of a dynamic object in the directory. For more information, see [MS-ADTS].

```
cn: ms-DS-Entry-Time-To-Die
ldapDisplayName: msDS-Entry-Time-To-Die
```


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```
attributeId: 1.2.840.113556.1.4.1622
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: e1e9bad7-c6dd-4101-a843-794cec85b038
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE | fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_OPERATIONAL
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.308 Attribute msDS-ExecuteScriptPassword

This attribute specifies a password to be used when renaming an Active Directory domain or forest.

```
cn: ms-DS-ExecuteScriptPassword
ldapDisplayName: msDS-ExecuteScriptPassword
attributeId: 1.2.840.113556.1.4.1783
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9d054a5a-d187-46c1-9d85-42dfc44a56dd
systemOnly: TRUE
searchFlags: 0
rangeLower: 0
rangeUpper: 64
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR NOT REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.309 Attribute msDS-ExpirePasswordsOnSmartCardOnlyAccounts

This attribute controls whether the passwords on smart-card-only accounts expire in accordance with the password policy.

```
cn: ms-DS-Expire-Passwords-On-Smart-Card-Only-Accounts
lDAPDisplayName: msDS-ExpirePasswordsOnSmartCardOnlyAccounts
attributeID: 1.2.840.113556.1.4.2344
attributeSyntax: 2.5.5.8
oMSyntax: 1
isSingleValued: TRUE
schemaIDGUID: 3417ab48-df24-4fb1-80b0-0fcb367e25e3
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

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2.310 Attribute msDS-ExternalDirectoryObjectId

This attribute specifies the unique identifier for users and groups and is populated when Windows Server operating system Active Directory is federated with Azure Active Directory.

```
cn: ms-DS-External-Directory-Object-Id
ldapDisplayName: msDS-ExternalDirectoryObjectId
attributeId: 1.2.840.113556.1.4.2310
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
rangeUpper: 256
schemaIdGuid: bd29bf90-66ad-40e1-887b-10df070419a6
systemOnly: FALSE
searchFlags: fATTINDEX | fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.311 Attribute msDS-ExternalKey

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-DS-External-Key
ldapDisplayName: msDS-ExternalKey
attributeId: 1.2.840.113556.1.4.1833
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: b92fd528-38ac-40d4-818d-0433380837c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10000
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.312 Attribute msDS-ExternalStore

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-DS-External-Store
ldapDisplayName: msDS-ExternalStore
attributeId: 1.2.840.113556.1.4.1834
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 604877cd-9cdb-47c7-b03d-3daadb044910
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10000
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.313 Attribute msDS-FailedInteractiveLogonCount

This attribute specifies the total number of failed interactive logons since this feature was turned on.

```
cn: ms-DS-Failed-Interactive-Logon-Count
ldapDisplayName: msDS-FailedInteractiveLogonCount
attributeId: 1.2.840.113556.1.4.1972
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: dc3ca86f-70ad-4960-8425-a4d6313d93dd
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.314 Attribute msDS-FailedInteractiveLogonCountAtLastSuccessfulLogon

This attribute specifies the total number of failed interactive logons up until the last successful Ctrl-Alt-Del logon.

```
cn: ms-DS-Failed-Interactive-Logon-Count-At-Last-Successful-Logon
ldapDisplayName: msDS-FailedInteractiveLogonCountAtLastSuccessfulLogon
attributeId: 1.2.840.113556.1.4.1973
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: c5d234e5-644a-4403-a665-e26e0aef5e98
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.315 Attribute msDS-FilterContainers

This attribute specifies which container types are shown by the Active Directory Users and Computers Microsoft Management Console (ADUC MMC) snap-in.

```
cn: ms-DS-Filter-Containers
ldapDisplayName: msDS-FilterContainers
attributeId: 1.2.840.113556.1.4.1703
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: fb00dcdf-ac37-483a-9c12-ac53a6603033
systemOnly: FALSE
searchFlags: 0
```


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```
rangeLower: 1
rangeUpper: 64
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.316 Attribute msDS-GenerationId

For a virtual machine (VM) snapshot resuming detection, this attribute represents the VM Generation ID.

```
cn: ms-DS-Generation-Id
ldapDisplayName: msDS-GenerationId
attributeId: 1.2.840.113556.1.4.2166
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
rangeLower: 16
rangeUpper: 16
systemOnly: TRUE
searchFlags: 0
schemaIdGuid: 1e5d393d-8cb7-4b4f-840a-973b36cc09c3
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.317 Attribute msDS-GeoCoordinatesAltitude

This attribute describes the elevation in a geographic coordinate system.

```
cn: ms-DS-GeoCoordinates-Altitude
ldapDisplayName: msDS-GeoCoordinatesAltitude
attributeId: 1.2.840.113556.1.4.2183
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
searchFlags: fATTINDEX
schemaIdGuid: a11703b7-5641-4d9c-863e-5fb3325e74e0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.318 Attribute msDS-GeoCoordinatesLatitude

This attribute describes the latitude in a geographic coordinate system.

```
cn: ms-DS-GeoCoordinates-Latitude
ldapDisplayName: msDS-GeoCoordinatesLatitude
attributeId: 1.2.840.113556.1.4.2184
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
searchFlags: fATTINDEX
```


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```
schemaIdGuid: dc66d44e-3d43-40f5-85c5-3c12e169927e
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.319 Attribute msDS-GeoCoordinatesLongitude

This attribute describes the longitude in a geographic coordinate system.

```
cn: ms-DS-GeoCoordinates-Longitude
ldapDisplayName: msDS-GeoCoordinatesLongitude
attributeId: 1.2.840.113556.1.4.2185
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
searchFlags: fATTINDEX
schemaIdGuid: 94c42110-bae4-4cea-8577-af813af5da25
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.320 Attribute msDS-GroupMSAMembership

This attribute is used for access checks to determine if a requestor has permission to retrieve the password for a group MSA.

```
cn: ms-DS-GroupMSAMembership
ldapDisplayName: msDS-GroupMSAMembership
attributeId: 1.2.840.113556.1.4.2200
attributeSyntax: 2.5.5.15
omSyntax: 66
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 132096
schemaIdGuid: 888eedd6-ce04-df40-b462-b8a50e41ba38
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.321 Attribute msDS-HABSeniorityIndex

This attribute contains the seniority index as applied by the organization where the individual works.

```
cn: ms-DS-HAB-Seniority-Index
ldapDisplayName: msDS-HABSeniorityIndex
attributeId: 1.2.840.113556.1.4.1997
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: def449f1-fd3b-4045-98cf-d9658da788b5
systemOnly: FALSE
```


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```
searchFlags: fATTINDEX
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 36000
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.322 Attribute msDS-HasDomainNCs

This attribute specifies replication information regarding the domain NCs that are present in a particular server. For more information, see [MS-DRSR].

```
cn: ms-DS-Has-Domain-NCs
ldapDisplayName: msDS-HasDomainNCs
attributeId: 1.2.840.113556.1.4.1820
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 6f17e347-a842-4498-b8b3-15e007da4fed
systemOnly: TRUE
searchFlags: 0
rangeLower: 4
rangeUpper: 4
linkID: 2026
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.323 Attribute msDS-hasFullReplicaNCs

For an Active Directory instance, this attribute identifies the partitions held as full replicas.

```
cn: ms-DS-Has-Full-Replica-NCs
ldapDisplayName: msDS-hasFullReplicaNCs
attributeId: 1.2.840.113556.1.4.1925
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 1d3c2d18-42d0-4868-99fe-0eca1e6fa9f3
systemOnly: TRUE
searchFlags: 0
linkID: 2104
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.324 Attribute msDS-HasInstantiatedNCs

This attribute specifies replication information in the form of the distinguished name of each naming context that is present on a particular server. For more information, see [MS-DRSR].

```
cn: ms-DS-Has-Instantiated-NCs
ldapDisplayName: msDS-HasInstantiatedNCs
attributeId: 1.2.840.113556.1.4.1709
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
schemaIdGuid: 11e9a5bc-4517-4049-af9c-51554fb0fc09
systemOnly: TRUE
searchFlags: 0
rangeLower: 4
rangeUpper: 4
linkID: 2002
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.325 Attribute msDS-hasMasterNCs

This attribute specifies the NCs contained on a domain controller (DC). For more information, see [MS-ADTS].

```
cn: ms-DS-Has-Master-NCs
ldapDisplayName: msDS-hasMasterNCs
attributeId: 1.2.840.113556.1.4.1836
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: ae2de0e2-59d7-4d47-8d47-ed4dfe4357ad
systemOnly: TRUE
searchFlags: 0
linkID: 2036
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.326 Attribute msDS-HostServiceAccount

On a computer object, this attribute lists service accounts that are configured to run on this computer.

```
cn: ms-DS-Host-Service-Account
ldapDisplayName: msDS-HostServiceAccount
attributeId: 1.2.840.113556.1.4.2056
attributeSyntax: 2.5.5.1
```


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```
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 80641043-15a2-40e1-92a2-8ca866f70776
attributeSecurityGUID: 77b5b886-944a-11d1-aebd-0000f80367c1
searchFlags: 0
linkID: 2166
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.327 Attribute msDS-HostServiceAccountBL

This attribute is the back link attribute for msDS-HostServiceAccount. It lists computer objects associated with a service account.

```
cn: ms-DS-Host-Service-Account-BL
ldapDisplayName: msDS-HostServiceAccountBL
attributeId: 1.2.840.113556.1.4.2057
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 79abe4eb-88f3-48e7-89d6-f4bc7e98c331
searchFlags: 0
linkID: 2167
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.328 Attribute msDS-IngressClaimsTransformationPolicy

This attribute is a link to a claims transformation policy object for the ingress claims (that is, claims entering this forest) from the Trusted Domain. This is applicable only for an outgoing or bidirectional cross-forest trust. If this link is absent, all the ingress claims are dropped.

```
cn: ms-DS-Ingress-Claims-Transformation-Policy
ldapDisplayName: msDS-IngressClaimsTransformationPolicy
attributeId: 1.2.840.113556.1.4.2191
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 86284c08-0c6e-1540-8b15-75147d23d20d
linkID: 2190
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.329 Attribute msDS-Integer

This attribute specifies an integer for a given object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Integer
ldapDisplayName: msDS-Integer
attributeId: 1.2.840.113556.1.4.1835
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: 7bc64cea-c04e-4318-b102-3e0729371a65
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.330 Attribute msDS-IntId

This attribute specifies an integer for a schema object. It can also be used to uniquely identify the associated schema object. For more information, see [MS-ADTS] section 3.1.1.2.3 and [MS-DRSR] section 5.15.

```
cn: ms-DS-IntId
ldapDisplayName: msDS-IntId
attributeId: 1.2.840.113556.1.4.1716
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bc60096a-1b47-4b30-8877-602c93f56532
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.331 Attribute msDS-IsCompliant

This attribute is used to determine if the object is compliant with company policies.

```
cn: ms-DS-Is-Compliant
ldapDisplayName: msDS-IsCompliant
attributeId: 1.2.840.113556.1.4.2314
attributeSyntax: 2.5.5.8
oMSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 59527d0f-b7c0-4ce2-a1dd-71cef6963292
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
isMemberOfPartialAttributeSet: TRUE
```


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Version-Specific Behavior: Implemented on Windows Server 2016.

2.332 Attribute msDS-IsDomainFor

This attribute specifies a back link for ms-DS-Has-Domain-NCs. For a partition root object, it identifies which Active Directory instances hold that partition as their primary domain.

```
cn: ms-DS-Is-Domain-For
ldapDisplayName: msDS-IsDomainFor
attributeId: 1.2.840.113556.1.4.1933
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: ff155a2a-44e5-4de0-8318-13a58988de4f
systemOnly: TRUE
searchFlags: 0
linkID: 2027
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.333 Attribute msDS-IsEnabled

This attribute is used to enable or disable the user-device relationship.

```
cn: ms-DS-Is-Enabled
ldapDisplayName: msDS-IsEnabled
attributeId: 1.2.840.113556.1.4.2248
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 22a95c0e-1f83-4c82-94ce-bea688cfc871
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.334 Attribute msDS-IsFullReplicaFor

This attribute specifies back link for ms-Ds-Has-Full-Replica-NCs. For a partition root object, it identifies which Active Directory instances hold that partition as a full replica.

```
cn: ms-DS-Is-Full-Replica-For
ldapDisplayName: msDS-IsFullReplicaFor
attributeId: 1.2.840.113556.1.4.1932
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: c8bc72e0-a6b4-48f0-94a5-fd76a88c9987
systemOnly: TRUE
searchFlags: 0
linkID: 2105
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.335 Attribute msDS-isGC

For an Active Directory instance, this attribute identifies the state of the global catalog (GC) on the directory system agent (DSA).

```
cn: ms-DS-isGC
ldapDisplayName: msDS-isGC
attributeId: 1.2.840.113556.1.4.1959
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 1df5cf33-0fe5-499e-90e1-e94b42718a46
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.336 Attribute msDS-IsManaged

This attribute is used to indicate that the device is managed by an on-premises mobile device manager.

```
cn: ms-DS-IsManaged
ldapDisplayName: msDS-IsManaged
attributeId: 1.2.840.113556.1.4.2270
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 60686ace-6c27-43de-a4e5-f00c2f8d3309
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.337 Attribute msDS-IsPartialReplicaFor

This attribute specifies a back link for has-Partial-Replica-NCs. For a partition root object, it identifies which Active Directory instances hold that partition as a partial replica.

```
cn: ms-DS-Is-Partial-Replica-For
ldapDisplayName: msDS-IsPartialReplicaFor
attributeId: 1.2.840.113556.1.4.1934
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 37c94ff6-c6d4-498f-b2f9-c6f7f8647809
systemOnly: TRUE
searchFlags: 0
linkID: 75
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.338 Attribute msDS-IsPossibleValuesPresent

This attribute identifies whether msDS-ClaimPossibleValues on a linked resource property has a value or does not have a value.

```
cn: ms-DS-Is-Possible-Values-Present
ldapDisplayName: msDS-IsPossibleValuesPresent
attributeId: 1.2.840.113556.1.4.2186
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
schemaIdGuid: 6fabdcda-8c53-204f-b1a4-9df0c67c1eb4
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.339 Attribute msDS-IsPrimaryComputerFor

This is the back link attribute for msDS-IsPrimaryComputer.

```
cn: ms-DS-Is-Primary-Computer-For
ldapDisplayName: msDS-IsPrimaryComputerFor
attributeId: 1.2.840.113556.1.4.2168
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 998c06ac-3f87-444e-a5df-11b03dc8a50c
linkID: 2187
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.340 Attribute msDS-isRODC

For an Active Directory instance, this attribute identifies whether the DSA is a read-only DSA.

```
cn: ms-DS-isRODC
ldapDisplayName: msDS-isRODC
attributeId: 1.2.840.113556.1.4.1960
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: a8e8aa23-3e67-4af1-9d7a-2f1a1d633ac9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.341 Attribute msDS-IssuerCertificates

This attribute specifies the keys used to sign certificates that have been issued by the Registration Service.

```
cn: ms-DS-Issuer-Certificates
ldapDisplayName: msDS-IssuerCertificates
attributeId: 1.2.840.113556.1.4.2240
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 6b3d6fda-0893-43c4-89fb-1fb52a6616a9
rangeLower: 1
rangeUpper: 65536
searchFlags: fCONFIDENTIAL
systemOnly: FALSE
showInAdvancedViewOnly: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.342 Attribute msDS-IssuerPublicCertificates

This attribute specifies the public keys of the key pairs used to sign the certificates that have been issued by the device registration service.

```
cn: ms-DS-Issuer-Public-Certificates
ldapDisplayName: msDS-IssuerPublicCertificates
attributeId: 1.2.840.113556.1.4.2269
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: b5f1edfe-b4d2-4076-ab0f-6148342b0bf6
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.343 Attribute msDS-IsUsedAsResourceSecurityAttribute

For a resource property, this attribute indicates whether it is being used as a secure attribute.

```
cn: ms-DS-Is-Used-As-Resource-Security-Attribute
ldapDisplayName: msDS-IsUsedAsResourceSecurityAttribute
attributeId: 1.2.840.113556.1.4.2095
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 51c9f89d-4730-468d-a2b5-1d493212d17e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.344 Attribute msDS-IsUserCachableAtRodc

For a read-only Active Directory instance, this attribute identifies whether the specified user's secrets can be cached.

```
cn: ms-DS-Is-User-Cachable-At-Rodc
ldapDisplayName: msDS-IsUserCachableAtRodc
attributeId: 1.2.840.113556.1.4.2025
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fe01245a-341f-4556-951f-48c033a89050
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.345 Attribute msDS-KeyApproximateLastLogonTimeStamp

The approximate time this key was last used in a logon operation.

```
cn: ms-DS-Key-Approximate-Last-Logon-Time-Stamp
ldapDisplayName: msDS-KeyApproximateLastLogonTimeStamp
attributeId: 1.2.840.113556.1.4.2323
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 649ac98d-9b9a-4d41-af6b-f616f2a62e4a
searchFlags: fATTINDEX
systemOnly: FALSE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.346 msDS-KeyCredentialLink

This attribute contains key material and usage information.

```
cn: ms-DS-Key-Credential-Link
ldapDisplayName: msDS-KeyCredentialLink
attributeID: 1.2.840.113556.1.4.2328
attributeSyntax: 2.5.5.7
omObjectClass: 1.2.840.113556.1.1.1.11
oMSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 5b47d60f-6090-40b2-9f37-2a4de88f3063
systemOnly: FALSE
searchFlags: 0
linkId: 2220
systemFlags: FLAG SCHEMA BASE OBJECT
attributeSecurityGUID: 9b026da6-0d3c-465c-8bee-5199d7165cba
showInAdvancedViewOnly: TRUE
```


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Version-Specific Behavior: Implemented on Windows Server 2016.

2.347 msDS-KeyCredentialLink-BL

This attribute is the backlink for msDS-KeyCredentialLink.

```
cn: ms-DS-Key-Credential-Link-BL
ldapDisplayName: msDS-KeyCredentialLink-BL
attributeID: 1.2.840.113556.1.4.2329
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
oMSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 938ad788-225f-4eee-93b9-ad24a159e1db
systemOnly: FALSE
searchFlags: 0
linkId: 2221
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.348 Attribute msDS-KeyId

This attribute contains a key identifier.

```
cn: ms-DS-Key-Id
ldapDisplayName: msDS-KeyId
attributeId: 1.2.840.113556.1.4.2315
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: c294f84b-2fad-4b71-be4c-9fc5701f60ba
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG SCHEMA BASE OBJECT
RangeLower: 0
RangeUpper: 132096
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.349 Attribute msDS-KeyMaterial

This attribute contains key material.

```
cn: ms-DS-Key-Material
ldapDisplayName: msDS-KeyMaterial
attributeId: 1.2.840.113556.1.4.2316
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: a12e0e9f-dedb-4f31-8f21-1311b958182f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
RangeLower: 0
RangeUpper: 132096
showInAdvancedViewOnly: TRUE
```


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Version-Specific Behavior: Implemented on Windows Server 2016.

2.350 Attribute msDS-KeyPrincipal

This attribute specifies the principal to which a key object applies.

```
cn: ms-DS-Key-Principal
ldapDisplayName: msDS-KeyPrincipal
attributeId: 1.2.840.113556.1.4.2318
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: TRUE
schemaIdGuid: bd61253b-9401-4139-a693-356fc400f3ea
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
linkID: 2218
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.351 Attribute msDS-KeyPrincipalBL

This attribute is the backlink for msDS-KeyPrincipal.

```
cn: ms-DS-Key-Principal-BL
ldapDisplayName: msDS-KeyPrincipalBL
attributeId: 1.2.840.113556.1.4.2319
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: d1328fbc-8574-4150-881d-0b1088827878
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
linkID: 2219
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.352 Attribute msDS-KeyUsage

This attribute identifies the usage scenario for the key.

```
cn: ms-DS-Key-Usage
ldapDisplayName: msDS-KeyUsage
attributeId: 1.2.840.113556.1.4.2317
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: de71b44c-29ba-4597-9eca-c3348ace1917
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
RangeLower: 0
RangeUpper: 132096
showInAdvancedViewOnly: TRUE
```


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Version-Specific Behavior: Implemented on Windows Server 2016.

2.353 Attribute msDS-KeyVersionNumber

For a given user, computer, or built-in account, this attribute specifies the Kerberos version number of the current key for that account. The Kerberos key version number for trusts is stored in the trusted domain object (TDO) whose object class is trustedDomain.

```
cn: ms-DS-KeyVersionNumber
ldapDisplayName: msDS-KeyVersionNumber
attributeId: 1.2.840.113556.1.4.1782
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: c523e9c0-33b5-4ac8-8923-b57b927f42f6
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.354 Attribute msDS-KrbTgtLink

For a computer, this attribute identifies the user object (krbtgt) that acts as the domain or secondary domain master secret. This depends on which domain or secondary domain the computer resides in.

```
cn: ms-DS-KrbTgt-Link
ldapDisplayName: msDS-KrbTgtLink
attributeId: 1.2.840.113556.1.4.1923
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 778ff5c9-6f4e-4b74-856a-d68383313910
systemOnly: FALSE
searchFlags: 0
linkID: 2100
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.355 Attribute msDS-KrbTgtLinkBl

This attribute specifies the back link for ms-DS-KrbTgt-Link. For a user object (krbtgt) that acts as a domain or secondary domain master secret, it identifies which computers are in that domain or secondary domain.

```
cn: ms-DS-KrbTgt-Link-BL
ldapDisplayName: msDS-KrbTgtLinkBl
attributeId: 1.2.840.113556.1.4.1931
attributeSyntax: 2.5.5.1
omSyntax: 127
```


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```
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 5dd68c41-bfdf-438b-9b5d-39d9618bf260
systemOnly: TRUE
searchFlags: 0
linkID: 2101
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.356 Attribute msDS-LastFailedInteractiveLogonTime

This attribute specifies the time that an incorrect password was presented during a Ctrl-Alt-Del logon.

```
cn: ms-DS-Last-Failed-Interactive-Logon-Time
ldapDisplayName: msDS-LastFailedInteractiveLogonTime
attributeId: 1.2.840.113556.1.4.1971
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: c7e7dafa-10c3-4b8b-9acd-54f11063742e
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.357 Attribute msDS-LastKnownRDN

This attribute holds the original relative distinguished name (RDN) of a deleted object.

```
cn: ms-DS-Last-Known-RDN
ldapDisplayName: msDS-LastKnownRDN
attributeId: 1.2.840.113556.1.4.2067
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8ab15858-683e-466d-877f-d640e1f9a611
systemOnly: TRUE
searchFlags: 0
rangeLower: 1
rangeUpper: 255
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.358 Attribute msDS-LastSuccessfulInteractiveLogonTime

This attribute specifies the time that the correct password was presented during a Ctrl-Alt-Del logon.

```
cn: ms-DS-Last-Successful-Interactive-Logon-Time
```


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```
ldapDisplayName: msDS-LastSuccessfulInteractiveLogonTime
attributeId: 1.2.840.113556.1.4.1970
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 011929e6-8b5d-4258-b64a-00b0b4949747
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.359 Attribute msDS-LocalEffectiveDeletionTime

This attribute stores the deletion time of the object in the local domain controller.

```
cn: ms-DS-Local-Effective-Deletion-Time
ldapDisplayName: msDS-LocalEffectiveDeletionTime
attributeId: 1.2.840.113556.1.4.2059
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 94f2800c-531f-4aeb-975d-48ac39fd8ca4
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT|FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.360 Attribute msDS-LocalEffectiveRecycleTime

This attribute stores the recycle time of the object in the local domain controller.

```
cn: ms-DS-Local-Effective-Recycle-Time
ldapDisplayName: msDS-LocalEffectiveRecycleTime
attributeId: 1.2.840.113556.1.4.2060
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 4ad6016b-b0d2-4c9b-93b6-5964b17b968c
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT|FLAG ATTR IS CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.361 Attribute msDS-LockoutDuration

This attribute specifies the lockout duration for locked-out user accounts.

```
cn: ms-DS-Lockout-Duration
```


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```
ldapDisplayName: msDS-LockoutDuration
attributeId: 1.2.840.113556.1.4.2018
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 0
schemaIdGuid: 421f889a-472e-4fe4-8eb9-e1d0bc6071b2
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.362 Attribute msDS-LockoutThreshold

This attribute specifies the lockout threshold for lockout of user accounts.

```
cn: ms-DS-Lockout-Threshold
ldapDisplayName: msDS-LockoutThreshold
attributeId: 1.2.840.113556.1.4.2019
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65535
schemaIdGuid: b8c8c35e-4a19-4a95-99d0-69fe4446286f
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.363 Attribute msDS-LockoutObservationWindow

This attribute specifies the observation window for lockout of user accounts.

```
cn: ms-DS-Lockout-Observation-Window
ldapDisplayName: msDS-LockoutObservationWindow
attributeId: 1.2.840.113556.1.4.2017
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 0
schemaIdGuid: b05bda89-76af-468a-b892-1be55558ecc8
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.364 Attribute msDS-LogonTimeSyncInterval

This attribute specifies the frequency (in days) with which the last logon time for a user/computer, recorded in the lastLogonTimestamp attribute, is updated.

```
cn: ms-DS-Logon-Time-Sync-Interval
ldapDisplayName: msDS-LogonTimeSyncInterval
attributeId: 1.2.840.113556.1.4.1784
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ad7940f8-e43a-4a42-83bc-d688e59ea605
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.365 Attribute msDS-ManagedPassword

This attribute is the managed password data for a group MSA.

```
cn: ms-DS-ManagedPassword
ldapDisplayName: msDS-ManagedPassword
attributeId: 1.2.840.113556.1.4.2196
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: e362ed86-b728-0842-b27d-2dea7a9df218
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.366 Attribute msDS-ManagedPasswordId

This attribute is the identifier for the current managed password data for a group MSA.

```
cn: ms-DS-ManagedPasswordId
ldapDisplayName: msDS-ManagedPasswordId
attributeId: 1.2.840.113556.1.4.2197
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
rangeUpper: 1024
schemaIdGuid: 0e78295a-c6d3-0a40-b491-d62251ffa0a6
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.367 Attribute msDS-ManagedPasswordInterval

This attribute is used to retrieve the number of days before a managed password is automatically changed for a group MSA.

```
cn: ms-DS-ManagedPasswordInterval
ldapDisplayName: msDS-ManagedPasswordInterval
attributeId: 1.2.840.113556.1.4.2199
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
schemaIdGuid: f8758ef7-ac76-8843-a2ee-a26b4dcaf409
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.368 Attribute msDS-ManagedPasswordPreviousId

This attribute is the identifier for the previous managed password data for a group MSA.

```
cn: ms-DS-ManagedPasswordPreviousId
ldapDisplayName: msDS-ManagedPasswordPreviousId
attributeId: 1.2.840.113556.1.4.2198
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
rangeUpper: 1024
schemaIdGuid: d0d62131-2d4a-d04f-99d9-1c63646229a4
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.369 Attribute msDs-masteredBy

This attribute specifies the back link for ms-DS-Has-Master-NCs. For more information, see [MS-ADTS].

```
cn: ms-DS-Mastered-By
ldapDisplayName: msDs-masteredBy
attributeId: 1.2.840.113556.1.4.1837
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 60234769-4819-4615-a1b2-49d2f119acb5
systemOnly: TRUE
searchFlags: 0
linkID: 2037
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```


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```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.370 Attribute msDS-MaximumPasswordAge

This attribute specifies the maximum age of passwords for user accounts.

```
cn: ms-DS-Maximum-Password-Age
ldapDisplayName: msDS-MaximumPasswordAge
attributeId: 1.2.840.113556.1.4.2011
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 0
schemaIdGuid: fdd337f5-4999-4fce-b252-8ff9c9b43875
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.371 Attribute msDS-MaximumRegistrationInactivityPeriod

This attribute specifies the maximum number of days used to detect inactivity of registration objects.

```
cn: ms-DS-Maximum-Registration-Inactivity-Period
ldapDisplayName: msDS-MaximumRegistrationInactivityPeriod
attributeId: 1.2.840.113556.1.4.2242
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 0a5caa39-05e6-49ca-b808-025b936610e7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.372 Attribute msDs-MaxValues

This attribute specifies the maximum values allowed for a given object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Max-Values
ldapDisplayName: msDs-MaxValues
attributeId: 1.2.840.113556.1.4.1842
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d1e169a4-ebe9-49bf-8fcb-8aef3874592d
```


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```
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.373 Attribute msds-memberOfTransitive

This attribute specifies the set of distinguished names (DNs) in the memberOf attribute on the current object and the DNs from the memberOf attributes of each of the objects specified in the memberOf attribute on the current object.

```
cn: ms-DS-Is-Member-Of-DL-Transitive
ldapDisplayName: msds-memberOfTransitive
attributeId: 1.2.840.113556.1.4.2236
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 862166b6-c941-4727-9565-48bfff2941de
systemOnly: TRUE
searchFlags: fBASEONLY
systemFlags: FLAG_ATTR_NOT_REPLICATED | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG ATTR IS OPERATIONAL | FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.374 Attribute msDS-MembersForAzRole

This attribute is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function. It specifies the list of member application groups or users linked to Az-Role objects.

```
cn: ms-DS-Members-For-Az-Role
ldapDisplayName: msDS-MembersForAzRole
attributeId: 1.2.840.113556.1.4.1806
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: cbf7e6cd-85a4-4314-8939-8bfe80597835
systemOnly: FALSE
searchFlags: 0
linkID: 2016
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.375 Attribute msDS-MembersForAzRoleBL

This attribute specifies the back link from a member application group or user to the Az-Role objects that link to it. It is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function.

```
cn: ms-DS-Members-For-Az-Role-BL
ldapDisplayName: msDS-MembersForAzRoleBL
attributeId: 1.2.840.113556.1.4.1807
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: ececcd20-a7e0-4688-9ccf-02ece5e287f5
systemOnly: TRUE
searchFlags: 0
linkID: 2017
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.376 Attribute msDS-MembersOfResourcePropertyList

For a resource property list object, this multivalued link attribute points to one or more resource property objects.

```
cn: ms-DS-Members-Of-Resource-Property-List
ldapDisplayName: msDS-MembersOfResourcePropertyList
attributeId: 1.2.840.113556.1.4.2103
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 4d371c11-4cad-4c41-8ad2-b180ab2bd13c
linkID: 2180
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.377 Attribute msDS-MembersOfResourcePropertyListBL

This attribute is the back link for msDS-MembersOfResourcePropertyList. For a resource property object, this attribute references the resource property list object that it is a member of.

```
cn: ms-DS-Members-Of-Resource-Property-List-BL
ldapDisplayName: msDS-MembersOfResourcePropertyListBL
attributeId: 1.2.840.113556.1.4.2104
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 7469b704-edb0-4568-a5a5-59f4862c75a7
linkID: 2181
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.378 Attribute msds-memberTransitive

This attribute specifies the set of distinguished names (DNs) in the member attribute on the current object and the DNs from the member attribute of each of the objects specified in the member attribute on the current object.

```
cn: ms-DS-Member-Transitive
ldapDisplayName: msds-memberTransitive
attributeId: 1.2.840.113556.1.4.2238
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: e215395b-9104-44d9-b894-399ec9e21dfc
systemOnly: TRUE
searchFlags: fBASEONLY
systemFlags: FLAG_ATTR_NOT_REPLICATED | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_ATTR_IS_OPERATIONAL | FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.379 Attribute msDS-MinimumPasswordAge

This attribute specifies the minimum age of passwords for user accounts.

```
cn: ms-DS-Minimum-Password-Age
ldapDisplayName: msDS-MinimumPasswordAge
attributeId: 1.2.840.113556.1.4.2012
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 0
schemaIdGuid: 2a74f878-4d9c-49f9-97b3-6767d1cbd9a3
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.380 Attribute msDS-MinimumPasswordLength

This attribute specifies the minimum length of passwords for user accounts.

```
cn: ms-DS-Minimum-Password-Length
ldapDisplayName: msDS-MinimumPasswordLength
attributeId: 1.2.840.113556.1.4.2013
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
```


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```
searchFlags: 0
rangeLower: 0
rangeUpper: 255
schemaIdGuid: b21b3439-4c3a-441c-bb5f-08f20e9b315e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.381 Attribute msDS-NC-Replica-Locations

This attribute specifies the list of servers that are the replica set for the corresponding non-domain NC. For more information, see [MS-ADTS] section 6.1.1.2.1.1.5.

```
cn: ms-DS-NC-Replica-Locations
ldapDisplayName: msDS-NC-Replica-Locations
attributeId: 1.2.840.113556.1.4.1661
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 97de9615-b537-46bc-ac0f-10720f3909f3
systemOnly: FALSE
searchFlags: 0
linkID: 1044
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.382 Attribute msDS-NC-RO-Replica-Locations

This attribute specifies a linked attribute on a cross ref object for a partition. This attribute lists the DSA instances that host the partition in a read-only manner.

```
cn: ms-DS-NC-RO-Replica-Locations
ldapDisplayName: msDS-NC-RO-Replica-Locations
attributeId: 1.2.840.113556.1.4.1967
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 3df793df-9858-4417-a701-735a1ecebf74
systemOnly: FALSE
searchFlags: 0
linkID: 2114
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.383 Attribute msDS-NC-RO-Replica-Locations-BL

This attribute specifies a back link attribute for ms-DS-NC-RO-Replica-Locations.

```
cn: ms-DS-NC-RO-Replica-Locations-BL
ldapDisplayName: msDS-NC-RO-Replica-Locations-BL
attributeId: 1.2.840.113556.1.4.1968
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: f547511c-5b2a-44cc-8358-992a88258164
systemOnly: FALSE
searchFlags: 0
linkID: 2115
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.384 Attribute msDS-NcType

This attribute specifies a bit field that maintains information about aspects of an NC replica that are relevant to replication.

```
cn: ms-DS-NC-Type
ldapDisplayName: msDS-NcType
attributeId: 1.2.840.113556.1.4.2024
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
schemaIdGuid: 5a2eacd7-cc2b-48cf-9d9a-b6f1a0024de9
showInAdvancedViewOnly: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.385 Attribute msDS-NCReplCursors

This attribute specifies a list of past and present replication partners for a particular machine, and how up-to-date that machine is with each of them. For more information, see [MS-DRSR].

```
cn: ms-DS-NC-Repl-Cursors
ldapDisplayName: msDS-NCReplCursors
attributeId: 1.2.840.113556.1.4.1704
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 8a167ce4-f9e8-47eb-8d78-f7fe80abb2cc
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.386 Attribute msDS-NCReplInboundNeighbors

This attribute specifies replication partners for this NC. For more information, see [MS-DRSR].

```
cn: ms-DS-NC-Repl-Inbound-Neighbors
ldapDisplayName: msDS-NCReplInboundNeighbors
attributeId: 1.2.840.113556.1.4.1705
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9edba85a-3e9e-431b-9b1a-a5b6e9eda796
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.387 Attribute msDS-NCReplOutboundNeighbors

This attribute specifies replication partners for this NC. For more information, see [MS-DRSR].

```
cn: ms-DS-NC-Repl-Outbound-Neighbors
ldapDisplayName: msDS-NCReplOutboundNeighbors
attributeId: 1.2.840.113556.1.4.1706
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 855f2ef5-a1c5-4cc4-ba6d-32522848b61f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.388 Attribute msDS-NeverRevealGroup

For an Active Directory instance, this attribute identifies the security group whose users never have their secrets disclosed to that instance.

```
cn: ms-DS-Never-Reveal-Group
ldapDisplayName: msDS-NeverRevealGroup
attributeId: 1.2.840.113556.1.4.1926
attributeSyntax: 2.5.5.1
```


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```
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 15585999-fd49-4d66-b25d-eeb96aba8174
systemOnly: FALSE
searchFlags: 0
linkID: 2106
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.389 Attribute msDS-Non-Security-Group-Extra-Classes

This attribute specifies the common names of the nonstandard classes that can be added to a nonsecurity group through the Active Directory Users and Computers snap-in (ADUC MMC). For more information, see [MSDN-ACL].

```
cn: ms-DS-Non-Security-Group-Extra-Classes
ldapDisplayName: msDS-Non-Security-Group-Extra-Classes
attributeId: 1.2.840.113556.1.4.1689
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2de144fc-1f52-486f-bdf4-16fcc3084e54
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.390 Attribute msDS-NonMembers

This attribute holds non-security members of a group and is used for Microsoft Exchange Server distribution lists.

```
cn: ms-DS-Non-Members
ldapDisplayName: msDS-NonMembers
attributeId: 1.2.840.113556.1.4.1793
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: cafcb1de-f23c-46b5-adf7-1e64957bd5db
systemOnly: FALSE
searchFlags: 0
linkID: 2014
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.391 Attribute msDS-NonMembersBL

This attribute specifies the back link from a nonmember group or a user to the nonmember groups that link to it. Groups of this type are not used by Active Directory, and this attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-DS-Non-Members-BL
ldapDisplayName: msDS-NonMembersBL
attributeId: 1.2.840.113556.1.4.1794
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 2a8c68fc-3a7a-4e87-8720-fe77c51cbe74
systemOnly: TRUE
searchFlags: 0
linkID: 2015
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.392 Attribute msDS-ObjectReference

For a given object, this attribute specifies a link to another object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Object-Reference
ldapDisplayName: msDS-ObjectReference
attributeId: 1.2.840.113556.1.4.1840
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 638ec2e8-22e7-409c-85d2-11b21bee72de
systemOnly: FALSE
searchFlags: 0
linkID: 2038
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.393 Attribute msDS-ObjectReferenceBL

For a given object, this attribute specifies a back link to another object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Object-Reference-BL
ldapDisplayName: msDS-ObjectReferenceBL
attributeId: 1.2.840.113556.1.4.1841
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 2b702515-c1f7-4b3b-b148-c0e4c6ceecb4
systemOnly: TRUE
searchFlags: 0
```


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```
linkID: 2039
systemFlags: FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.394 Attribute msDS-ObjectSoa

This attribute is used to identify the source of authority of an object.

```
cn: ms-DS-Object-SOA
ldapDisplayName: msDS-ObjectSoa
attributeId: 1.2.840.113556.1.4.2353
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 34f6bdf5-2e79-4c3b-8e14-3d93b75aab89
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
rangeLower: 1
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.395 Attribute msDS-OIDToGroupLink

On an object of class msPKI-Enterprise-Oid, this attribute identifies the group object corresponding to the issuance policy represented by this object.

```
cn: ms-DS-OIDToGroup-Link
ldapDisplayName: msDS-OIDToGroupLink
attributeId: 1.2.840.113556.1.4.2051
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: f9c9a57c-3941-438d-bebf-0edaf2aca187
systemOnly: FALSE
searchFlags: 0
linkID: 2164
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.396 Attribute msDS-OIDToGroupLinkBl

This attribute is the back link attribute for ms-DS-OIDToGroupLink; it identifies the issuance policy, represented by an object of class msPKI-Enterprise-Oid, that is mapped to this group.

```
cn: ms-DS-OIDToGroup-Link-BL
ldapDisplayName: msDS-OIDToGroupLinkBl
attributeId: 1.2.840.113556.1.4.2052
attributeSyntax: 2.5.5.1
omSyntax: 127
```


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```
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 1a3d0d20-5844-4199-ad25-0f5039a76ada
systemOnly: TRUE
searchFlags: 0
linkID: 2165
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.397 Attribute msDS-OperationsForAzRole

This attribute is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function. It specifies a list of operations.

```
cn: ms-DS-Operations-For-Az-Role
ldapDisplayName: msDS-OperationsForAzRole
attributeId: 1.2.840.113556.1.4.1812
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 93f701be-fa4c-43b6-bc2f-4dbea718ffab
systemOnly: FALSE
searchFlags: 0
linkID: 2022
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.398 Attribute msDS-OperationsForAzRoleBL

This attribute specifies a back link from Az-Operation to the Az-Role objects that link to it. It is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function.

```
cn: ms-DS-Operations-For-Az-Role-BL
ldapDisplayName: msDS-OperationsForAzRoleBL
attributeId: 1.2.840.113556.1.4.1813
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: f85b6228-3734-4525-b6b7-3f3bb220902c
systemOnly: TRUE
searchFlags: 0
linkID: 2023
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.399 Attribute msDS-OperationsForAzTask

This attribute is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function. It specifies a list of operations linked to Az-Task.

```
cn: ms-DS-Operations-For-Az-Task
ldapDisplayName: msDS-OperationsForAzTask
attributeId: 1.2.840.113556.1.4.1808
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 1aacb436-2e9d-44a9-9298-ce4debeb6ebf
systemOnly: FALSE
searchFlags: 0
linkID: 2018
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.400 Attribute msDS-OperationsForAzTaskBL

This attribute specifies a back link from Az-Operation to the Az-Task object(s) that link to it. It is used by the Authorization Manager Feature of Windows Server 2003 and is not necessary for Active Directory functioning.

```
cn: ms-DS-Operations-For-Az-Task-BL
ldapDisplayName: msDS-OperationsForAzTaskBL
attributeId: 1.2.840.113556.1.4.1809
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: a637d211-5739-4ed1-89b2-88974548bc59
systemOnly: TRUE
searchFlags: 0
linkID: 2019
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.401 Attribute msDS-OptionalFeatureFlags

This attribute stores an integer value that contains flags that define behavior of an optional feature in Active Directory.

```
cn: ms-DS-Optional-Feature-Flags
ldapDisplayName: msDS-OptionalFeatureFlags
attributeId: 1.2.840.113556.1.4.2063
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8a0560c1-97b9-4811-9db7-dc061598965b
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.402 Attribute msDS-OptionalFeatureGUID

This attribute stores the GUID of an optional feature.

```
cn: ms-DS-Optional-Feature-GUID
ldapDisplayName: msDS-OptionalFeatureGUID
attributeId: 1.2.840.113556.1.4.2062
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9b88bda8-dd82-4998-a91d-5f2d2baf1927
systemOnly: TRUE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.403 Attribute msDS-Other-Settings

For a given object, this attribute specifies any configurable setting in the "Name, Value" format. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Other-Settings
ldapDisplayName: msDS-Other-Settings
attributeId: 1.2.840.113556.1.4.1621
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 79d2f34c-9d7d-42bb-838f-866b3e4400e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.404 Attribute msDS-parentdistname

This attribute specifies the distinguished name (DN) of the parent object of the current object.

```
cn: ms-DS-Parent-Dist-Name
ldapDisplayName: msDS-parentdistname
attributeId: 1.2.840.113556.1.4.2203
attributeSyntax: 2.5.5.1
```


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```
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIDGUID: b918fe7d-971a-f404-9e21-9261abec970b
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_ATTR_NOT_REPLICATED | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_ATTR_IS_OPERATIONAL | FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.405 Attribute msDS-PasswordComplexityEnabled

This attribute specifies password complexity status for user accounts.

```
cn: ms-DS-Password-Complexity-Enabled
ldapDisplayName: msDS-PasswordComplexityEnabled
attributeId: 1.2.840.113556.1.4.2015
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: db68054b-c9c3-4bf0-b15b-0fb52552a610
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.406 Attribute msDS-PasswordHistoryLength

This attribute specifies the length of password history for user accounts.

```
cn: ms-DS-Password-History-Length
ldapDisplayName: msDS-PasswordHistoryLength
attributeId: 1.2.840.113556.1.4.2014
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65535
schemaIdGuid: fed81bb7-768c-4c2f-9641-2245de34794d
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.407 Attribute msDS-PasswordReversibleEncryptionEnabled

This attribute specifies password-reversible encryption status for user accounts.

```
cn: ms-DS-Password-Reversible-Encryption-Enabled
ldapDisplayName: msDS-PasswordReversibleEncryptionEnabled
```


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```
attributeId: 1.2.840.113556.1.4.2016
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 75ccdd8f-af6c-4487-bb4b-69e4d38a959c
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.408 Attribute msDS-PasswordSettingsPrecedence

This attribute specifies the precedence of password settings.

```
cn: ms-DS-Password-Settings-Precedence
ldapDisplayName: msDS-PasswordSettingsPrecedence
attributeId: 1.2.840.113556.1.4.2023
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
schemaIdGuid: 456374ac-1f0a-4617-93cf-bc55a7c9d341
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.409 Attribute msDS-PerUserTrustQuota

For a given user, this attribute specifies a quota for creating trusted domain objects (TDOs).

```
cn: MS-DS-Per-User-Trust-Quota
ldapDisplayName: msDS-PerUserTrustQuota
attributeId: 1.2.840.113556.1.4.1788
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d161adf0-ca24-4993-a3aa-8b2c981302e8
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.410 Attribute msDS-PerUserTrustTombstonesQuota

For a given user, this attribute specifies a quota for deleting TDOs.

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```
cn: MS-DS-Per-User-Trust-Tombstones-Quota
ldapDisplayName: msDS-PerUserTrustTombstonesQuota
attributeId: 1.2.840.113556.1.4.1790
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8b70a6c6-50f9-4fa3-a71e-1ce03040449b
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.411 Attribute msDS-PhoneticCompanyName

This attribute contains the phonetic company name where the person works.

```
cn: ms-DS-Phonetic-Company-Name
ldapDisplayName: msDS-PhoneticCompanyName
attributeId: 1.2.840.113556.1.4.1945
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5bd5208d-e5f4-46ae-a514-543bc9c47659
systemOnly: FALSE
searchFlags: fATTINDEX | fANR
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 35985
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.412 Attribute msDS-PhoneticDepartment

This attribute contains the phonetic department name where the person works.

```
cn: ms-DS-Phonetic-Department
ldapDisplayName: msDS-PhoneticDepartment
attributeId: 1.2.840.113556.1.4.1944
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 6cd53daf-003e-49e7-a702-6fa896e7a6ef
systemOnly: FALSE
searchFlags: fATTINDEX | fANR
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 35984
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.413 Attribute msDS-PhoneticDisplayName

This attribute contains the phonetic display name of an object. In the absence of a phonetic display name, the existing display name is used.

```
cn: ms-DS-Phonetic-Display-Name
ldapDisplayName: msDS-PhoneticDisplayName
attributeId: 1.2.840.113556.1.4.1946
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: e21a94e4-2d66-4ce5-b30d-0ef87a776ff0
systemOnly: FALSE
searchFlags: fATTINDEX | fANR
rangeLower: 0
rangeUpper: 256
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 35986
systemFlags: FLAG SCHEMA BASE OBJECT
isMemberOfPartialAttributeSet: TRUE
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.414 Attribute msDS-PhoneticFirstName

This attribute contains the phonetic given name or first name of the person.

```
cn: ms-DS-Phonetic-First-Name
ldapDisplayName: msDS-PhoneticFirstName
attributeId: 1.2.840.113556.1.4.1942
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4b1cba4e-302f-4134-ac7c-f01f6c797843
systemOnly: FALSE
searchFlags: fATTINDEX | fANR
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 35982
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.415 Attribute msDS-PhoneticLastName

This attribute contains the phonetic last name of the person.

```
cn: ms-DS-Phonetic-Last-Name
ldapDisplayName: msDS-PhoneticLastName
attributeId: 1.2.840.113556.1.4.1943
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: TRUE
schemaIdGuid: f217e4ec-0836-4b90-88af-2f5d4bbda2bc
systemOnly: FALSE
searchFlags: fATTINDEX | fANR
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 35983
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.416 Attribute msDS-Preferred-GC-Site

This attribute specifies a preferred global catalog server and is used during group expansion. For more information, see [MS-SAMR].

```
cn: ms-DS-Preferred-GC-Site
ldapDisplayName: msDS-Preferred-GC-Site
attributeId: 1.2.840.113556.1.4.1444
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: d921b50a-0ab2-42cd-87f6-09cf83a91854
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.417 Attribute msDS-PrimaryComputer

For a user or group object, this attribute identifies the primary computers.

```
cn: ms-DS-Primary-Computer
ldapDisplayName: msDS-PrimaryComputer
attributeId: 1.2.840.113556.1.4.2167
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: fATTINDEX
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: a13df4e2-dbb0-4ceb-828b-8b2e143e9e81
linkID: 2186
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.418 Attribute msDS-PrincipalName

This attribute specifies the account name for the security principal (constructed).

```
cn: ms-DS-Principal-Name
ldapDisplayName: msDS-PrincipalName
attributeId: 1.2.840.113556.1.4.1865
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 564e9325-d057-c143-9e3b-4f9e5ef46f93
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.419 Attribute msDS-PromotionSettings

For a computer, this attribute contains an XML string to be used for delegated DSA promotion.

```
cn: ms-DS-Promotion-Settings
ldapDisplayName: msDS-PromotionSettings
attributeId: 1.2.840.113556.1.4.1962
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: c881b4e2-43c0-4ebe-b9bb-5250aa9b434c
systemOnly: TRUE
searchFlags: 0
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.420 Attribute msDS-PSOApplied

This attribute specifies a password settings object. When present on a user or group object, it identifies the password settings object applied to that user or group object.

```
cn: ms-DS-PSO-Applied
ldapDisplayName: msDS-PSOApplied
attributeId: 1.2.840.113556.1.4.2021
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 5e6cf031-bda8-43c8-aca4-8fee4127005b
linkID: 2119
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR NOT REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.421 Attribute msDS-PSOAppliesTo

This attribute specifies the links to objects that this password settings object applies to.

```
cn: ms-DS-PSO-Applies-To
ldapDisplayName: msDS-PSOAppliesTo
attributeId: 1.2.840.113556.1.4.2020
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 64c80f48-cdd2-4881-a86d-4e97b6f561fc
linkID: 2118
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.422 Attribute msDS-QuotaAmount

This attribute specifies the assigned quota in terms of the number of objects owned in the database. For more information on how Active Directory uses this attribute, refer to [MS-ADTS].

```
cn: ms-DS-Quota-Amount
ldapDisplayName: msDS-QuotaAmount
attributeId: 1.2.840.113556.1.4.1845
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fbb9a00d-3a8c-4233-9cf9-7189264903a1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.423 Attribute msDS-QuotaEffective

For a given user, this attribute specifies the cumulative quota based on multiple policies within a given NC. For more information about this attribute, see [MS-ADTS] section 3.1.1.4.5.22.

```
cn: ms-DS-Quota-Effective
ldapDisplayName: msDS-QuotaEffective
attributeId: 1.2.840.113556.1.4.1848
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 6655b152-101c-48b4-b347-e1fcebc60157
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.424 Attribute msDS-QuotaTrustee

For a given set of quotas, this attribute specifies the SID for a security principal who is constrained by the quota policy. For more information on how Active Directory uses this attribute, refer to [MS-ADTS].

```
cn: ms-DS-Quota-Trustee
ldapDisplayName: msDS-QuotaTrustee
attributeId: 1.2.840.113556.1.4.1844
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 16378906-4ea5-49be-a8d1-bfd41dff4f65
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 28
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.425 Attribute msDS-QuotaUsed

For a given user, this attribute specifies the quota currently consumed. For more information about this attribute, see [MS-ADTS] section 3.1.1.4.5.23.

```
cn: ms-DS-Quota-Used
ldapDisplayName: msDS-QuotaUsed
attributeId: 1.2.840.113556.1.4.1849
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: b5a84308-615d-4bb7-b05f-2f1746aa439f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.426 Attribute msDS-RegisteredOwner

This attribute is a single-valued binary attribute containing the primary SID that references the first user to register the device. The value is not removed during de-registration, but could be managed by an administrator.

```
cn: ms-DS-Registered-Owner
ldapDisplayName: msDS-RegisteredOwner
attributeId: 1.2.840.113556.1.4.2258
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 617626e9-01eb-42cf-991f-ce617982237e
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.427 Attribute msDS-RegisteredUsers

This attribute contains the list of users that have registered the device. Users in this list have access to all of the features provided by the "Company Portal" application, and they have single-sign-on access to company resources.

```
cn: ms-DS-Registered-Users
ldapDisplayName: msDS-RegisteredUsers
attributeId: 1.2.840.113556.1.4.2263
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 0449160c-5a8e-4fc8-b052-01c0f6e48f02
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.428 Attribute msDS-RegistrationQuota

This attribute specifies the policy used to limit the number of registrations allowed for a single user.

```
cn: ms-DS-Registration-Quota
ldapDisplayName: msDS-RegistrationQuota
attributeId: 1.2.840.113556.1.4.2241
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ca3286c2-1f64-4079-96bc-e62b610e730f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

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2.429 Attribute msDS-ReplAttributeMetaData

This attribute specifies a list of metadata for each replicated attribute. The metadata indicates who last changed the attribute. For more information, see [MS-DRSR].

```
cn: ms-DS-Repl-Attribute-Meta-Data
ldapDisplayName: msDS-ReplAttributeMetaData
attributeId: 1.2.840.113556.1.4.1707
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d7c53242-724e-4c39-9d4c-2df8c9d66c7a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.430 Attribute msDS-Replication-Notify-First-DSA-Delay

This attribute specifies the delay between changes to directory objects and notification of the first replica partner for an NC.

```
cn: ms-DS-Replication-Notify-First-DSA-Delay
ldapDisplayName: msDS-Replication-Notify-First-DSA-Delay
attributeId: 1.2.840.113556.1.4.1663
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 85abd4f4-0a89-4e49-bdec-6f35bb2562ba
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.431 Attribute msDS-Replication-Notify-Subsequent-DSA-Delay

This attribute specifies the delay between notification of each subsequent replica partner for an NC.

```
cn: ms-DS-Replication-Notify-Subsequent-DSA-Delay
ldapDisplayName: msDS-Replication-Notify-Subsequent-DSA-Delay
attributeId: 1.2.840.113556.1.4.1664
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d63db385-dd92-4b52-b1d8-0d3ecc0e86b6
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.432 Attribute msDS-ReplicationEpoch

This attribute specifies the epoch under which all the DCs are replicating. For more information, see [MS-DRSR].

```
cn: ms-DS-ReplicationEpoch
ldapDisplayName: msDS-ReplicationEpoch
attributeId: 1.2.840.113556.1.4.1720
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 08e3aa79-eb1c-45b5-af7b-8f94246c8e41
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.433 Attribute msDS-ReplValueMetaData

This attribute specifies a list of metadata for each value of an attribute. The metadata indicates who last changed the value. For more information, see [MS-DRSR].

```
cn: ms-DS-Repl-Value-Meta-Data
ldapDisplayName: msDS-ReplValueMetaData
attributeId: 1.2.840.113556.1.4.1708
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2f5c8145-e1bd-410b-8957-8bfa81d5acfd
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.434 Attribute msDS-ReplValueMetaDataExt

This attribute contains no values on any object.

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```
cn: ms-DS-Repl-Value-Meta-Data-Ext
ldapDisplayName: msDS-ReplValueMetaDataExt
attributeId: 1.2.840.113556.1.4.2235
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 1e02d2ef-44ad-46b2-a67d-9fd18d780bca
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_ATTR_IS_CONSTRUCTED | FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.435 Attribute msDS-RequiredDomainBehaviorVersion

This attribute specifies the required domain functional level for an optional feature enabled in a domain-mode scope.

```
cn: ms-DS-Required-Domain-Behavior-Version
ldapDisplayName: msDS-RequiredDomainBehaviorVersion
attributeId: 1.2.840.113556.1.4.2066
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: eadd3dfe-ae0e-4cc2-b9b9-5fe5b6ed2dd2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.436 Attribute msDS-RequiredForestBehaviorVersion

This attribute specifies the required forest functional level for an optional feature.

```
cn: ms-DS-Required-Forest-Behavior-Version
ldapDisplayName: msDS-RequiredForestBehaviorVersion
attributeId: 1.2.840.113556.1.4.2079
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 4beca2e8-a653-41b2-8fee-721575474bec
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.437 Attribute msDS-ResultantPSO

This attribute specifies the effective password policy applied to this object.

```
cn: ms-DS-Resultant-PSO
```


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```
ldapDisplayName: msDS-ResultantPSO
attributeId: 1.2.840.113556.1.4.2022
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: b77ea093-88d0-4780-9a98-911f8e8b1dca
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.438 Attribute msDS-RetiredReplNCSignatures

This attribute specifies information about NCs that are no longer held on this computer. For more information, see [MS-DRSR].

```
cn: ms-DS-Retired-Repl-NC-Signatures
ldapDisplayName: msDS-RetiredReplNCSignatures
attributeId: 1.2.840.113556.1.4.1826
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: d5b35506-19d6-4d26-9afb-11357ac99b5e
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.439 Attribute msDS-RevealedDSAs

This attribute specifies the back link for ms-DS-Revealed-Users. For a user, it identifies which Active Directory instances hold that user's secret.

```
cn: ms-DS-Revealed-DSAs
ldapDisplayName: msDS-RevealedDSAs
attributeId: 1.2.840.113556.1.4.1930
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 94f6f2ac-c76d-4b5e-b71f-f332c3e93c22
systemOnly: TRUE
searchFlags: 0
linkID: 2103
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.440 Attribute msDS-RevealedList

For an Active Directory instance, this attribute identifies the user objects whose secrets have been disclosed to that instance.

```
cn: ms-DS-Revealed-List
ldapDisplayName: msDS-RevealedList
attributeId: 1.2.840.113556.1.4.1940
attributeSyntax: 2.5.5.14
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.12
isSingleValued: FALSE
schemaIdGuid: cbdad11c-7fec-387b-6219-3a0627d9af81
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.441 Attribute msDS-RevealedListBL

This attribute specifies the back link attribute for ms-DS-Revealed-List.

```
cn: ms-DS-Revealed-List-BL
ldapDisplayName: msDS-RevealedListBL
attributeId: 1.2.840.113556.1.4.1975
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: aa1c88fd-b0f6-429f-b2ca-9d902266e808
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.442 Attribute msDS-RevealedUsers

For an Active Directory instance, this attribute identifies the user objects whose secrets have been disclosed to that instance.

```
cn: ms-DS-Revealed-Users
ldapDisplayName: msDS-RevealedUsers
attributeId: 1.2.840.113556.1.4.1924
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
schemaIdGuid: 185c7821-3749-443a-bd6a-288899071adb
systemOnly: TRUE
searchFlags: 0
linkID: 2102
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.443 Attribute msDS-RevealOnDemandGroup

For an Active Directory instance, this attribute identifies the security group whose users can have their secrets disclosed to that instance.

```
cn: ms-DS-Reveal-OnDemand-Group
ldapDisplayName: msDS-RevealOnDemandGroup
attributeId: 1.2.840.113556.1.4.1928
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 303d9f4a-1dd6-4b38-8fc5-33afe8c988ad
systemOnly: FALSE
searchFlags: 0
linkID: 2110
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.444 Attribute msDS-RIDPoolAllocationEnabled

This attribute indicates whether RID pool allocation is enabled.

```
cn: ms-DS-RID-Pool-Allocation-Enabled
ldapDisplayName: msDS-RIDPoolAllocationEnabled
attributeId: 1.2.840.113556.1.4.2213
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 24977c8c-c1b7-3340-b4f6-2b375eb711d7
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.445 Attribute msDs-Schema-Extensions

This attribute specifies a BLOB used to store information about extensions to schema objects.

```
cn: ms-ds-Schema-Extensions
ldapDisplayName: msDs-Schema-Extensions
attributeId: 1.2.840.113556.1.4.1440
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: b39a61be-ed07-4cab-9a4a-4963ed0141e1
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.446 Attribute msDS-SDReferenceDomain

This attribute specifies the domain to be used for default security descriptor translation for a non-domain NC. For more information, see [MS-WPO].

```
cn: ms-DS-SD-Reference-Domain
ldapDisplayName: msDS-SDReferenceDomain
attributeId: 1.2.840.113556.1.4.1711
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 4c51e316-f628-43a5-b06b-ffb695fcb4f3
systemOnly: FALSE
searchFlags: 0
linkID: 2000
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.447 Attribute msDS-SecondaryKrbTgtNumber

For a user object (krbtgt) acting as a secondary domain master secret, this attribute identifies the protocol identification number associated with the secondary domain.

```
cn: ms-DS-Secondary-KrbTgt-Number
ldapDisplayName: msDS-SecondaryKrbTgtNumber
attributeId: 1.2.840.113556.1.4.1929
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: aa156612-2396-467e-ad6a-28d23fdb1865
systemOnly: TRUE
searchFlags: fATTINDEX
rangeLower: 65536
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.448 Attribute msDS-Security-Group-Extra-Classes

This attribute specifies the common names of the nonstandard classes that can be added to a security group through the Active Directory Users and Computers snap-in (ADUC MMC).

```
cn: ms-DS-Security-Group-Extra-Classes
ldapDisplayName: msDS-Security-Group-Extra-Classes
attributeId: 1.2.840.113556.1.4.1688
```


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```
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 4f146ae8-a4fe-4801-a731-f51848a4f4e4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.449 Attribute msDS-ServiceAllowedNTLMNetworkAuthentication

This attribute is used to determine if a service is allowed to authenticate using NTLM authentication.

```
cn: ms-DS-Service-Allowed-NTLM-Network-Authentication
ldapDisplayName: msDS-ServiceAllowedNTLMNetworkAuthentication
attributeId: 1.2.840.113556.1.4.2349
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: FALSE
schemaIdGuid: 278947b9-5222-435e-96b7-1503858c2b48
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.450 Attribute msDS-ServiceAllowedToAuthenticateFrom

This attribute is used to determine whether a service has permission to authenticate from a computer.

```
cn: ms-DS-Service-Allowed-To-Authenticate-From
ldapDisplayName: msDS-ServiceAllowedToAuthenticateFrom
attributeId: 1.2.840.113556.1.4.2283
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 97da709a-3716-4966-b1d1-838ba53c3d89
systemOnly: FALSE
searchFlags: 0
RangeLower: 0
RangeUpper: 132096
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.451 Attribute msDS-ServiceAllowedToAuthenticateTo

This attribute is used to determine whether a service has permission to authenticate to a service.

```
cn: ms-DS-Service-Allowed-To-Authenticate-To
ldapDisplayName: msDS-ServiceAllowedToAuthenticateTo
attributeId: 1.2.840.113556.1.4.2282
attributeSyntax: 2.5.5.10
omSyntax: 4
```


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```
isSingleValued: TRUE
schemaIdGuid: f2973131-9b4d-4820-b4de-0474ef3b849f
systemOnly: FALSE
searchFlags: 0
RangeLower: 0
RangeUpper: 132096
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.452 Attribute msDS-ServiceAuthNPolicy

This attribute specifies which AuthNPolicy is applied to services assigned to this silo object.

```
cn: ms-DS-Service-AuthN-Policy
ldapDisplayName: msDS-ServiceAuthNPolicy
attributeId: 1.2.840.113556.1.4.2293
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: TRUE
schemaIdGuid: 2a6a6d95-28ce-49ee-bb24-6d1fc01e3111
systemOnly: FALSE
searchFlags: 0
linkID: 2210
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.453 Attribute msDS-ServiceAuthNPolicyBL

This attribute is the backlink for msDS-ServiceAuthNPolicy.

```
cn: ms-DS-Service-AuthN-Policy-BL
ldapDisplayName: msDS-ServiceAuthNPolicyBL
attributeId: 1.2.840.113556.1.4.2294
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 2c1128ec-5aa2-42a3-b32d-f0979ca9fcd2
systemOnly: TRUE
searchFlags: 0
linkID: 2211
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.454 Attribute msDS-ServiceTGTLifetime

This attribute specifies the maximum age of a Kerberos TGT issued to a service in units of 10^(-7) seconds.

```
cn: ms-DS-Service-TGT-Lifetime
ldapDisplayName: msDS-ServiceTGTLifetime
attributeId: 1.2.840.113556.1.4.2284
attributeSyntax: 2.5.5.16
omSyntax: 65
```


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```
isSingleValued: TRUE
schemaIdGuid: 5dfe3c20-ca29-407d-9bab-8421e55eb75c
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.455 Attribute msDS-Settings

This attribute specifies settings for a given object. Its use is dependent on the object with which it is associated.

```
cn: ms-DS-Settings
ldapDisplayName: msDS-Settings
attributeId: 1.2.840.113556.1.4.1697
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0e1b47d7-40a3-4b48-8d1b-4cac0c1cdf21
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1000000
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.456 Attribute msDS-ShadowPrincipalSid

This attribute contains the SID of a principal from an external forest.

```
cn: ms-DS-Shadow-Principal-Sid
ldapDisplayName: msDS-ShadowPrincipalSid
attributeID: 1.2.840.113556.1.4.2324
attributeSyntax: 2.5.5.17
oMSyntax: 4
isSingleValued: TRUE
schemaIDGUID: 1dcc0722-aab0-4fef-956f-276fe19de107
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.457 Attribute msDS-SiteName

For an Active Directory instance, this attribute identifies the site name that contains the DSA.

```
cn: ms-DS-SiteName
ldapDisplayName: msDS-SiteName
attributeId: 1.2.840.113556.1.4.1961
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 98a7f36d-3595-448a-9e6f-6b8965baed9c
systemOnly: FALSE
```


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```
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.458 Attribute msDS-Site-Affinity

This attribute specifies site affinity and is used during group expansion. For more information, see [MS-SAMR].

```
cn: ms-DS-Site-Affinity
ldapDisplayName: msDS-Site-Affinity
attributeId: 1.2.840.113556.1.4.1443
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: c17c5602-bcb7-46f0-9656-6370ca884b72
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.459 Attribute msDS-SourceAnchor

The msDS-SourceAnchor attribute defines a unique, immutable identifier for the object in the authoritative directory.

```
cn: ms-DS-Source-Anchor
ldapDisplayName: msDS-SourceAnchor
attributeId: 1.2.840.113556.1.4.2352
attributeSyntax: 2.5.5.12
oMSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b002f407-1340-41eb-bca0-bd7d938e25a9
systemOnly: FALSE
searchFlags: fPDNTATTINDEX | fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
rangeLower: 1
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.460 Attribute msDS-SourceObjectDN

This attribute specifies a string representation of the DN of the object in another forest that has a relationship to this object. The details of the relationship are defined by the objects.

```
cn: ms-DS-Source-Object-DN
ldapDisplayName: msDS-SourceObjectDN
```


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```
attributeId: 1.2.840.113556.1.4.1879
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 773e93af-d3b4-48d4-b3f9-06457602d3d0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 10240
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.461 Attribute msDS-SPNSuffixes

This attribute specifies the suffixes of DNS host names used by servers in the forest. These DNS suffixes are shared with other forests that have cross-forest trust with this forest.

```
cn: ms-DS-SPN-Suffixes
ldapDisplayName: msDS-SPNSuffixes
attributeId: 1.2.840.113556.1.4.1715
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 789ee1eb-8c8e-4e4c-8cec-79b31b7617b5
systemOnly: FALSE
searchFlags: 0
rangeUpper: 255
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.462 Attribute msDS-StrongNTLMPolicy

This attribute specifies policy options for NTLM secrets with strong entropy.

```
cn: ms-DS-Strong-NTLM-Policy
ldapDisplayName: msDS-StrongNTLMPolicy
attributeId: 1.2.840.113556.1.4.2350
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
schemaIdGuid: aacd2170-482a-44c6-b66e-42c2f66a285c
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

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2.463 Attribute msDS-SupportedEncryptionTypes

This attribute specifies the encryption algorithms supported by user, computer, or trust accounts. The Key Distribution Center (KDC) uses this information while generating a service ticket for this account. Services and computers can automatically update this attribute on their respective accounts in Active Directory, and therefore need write access to this attribute.

```
cn: ms-DS-Supported-Encryption-Types
ldapDisplayName: msDS-SupportedEncryptionTypes
attributeId: 1.2.840.113556.1.4.1963
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 20119867-1d04-4ab7-9371-cfc3d5df0afd
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.464 Attribute msDS-SyncServerUrl

This attribute stores information about the sync server (in URL format) that hosts the user's sync folder.

```
cn: ms-DS-SyncServerUrl
ldapDisplayName: msDS-SyncServerUrl
AttributeID: 1.2.840.113556.1.4.2276
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: b7acc3d2-2a74-4fa4-ac25-e63fe8b61218
SystemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 512
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.465 Attribute msDS-TasksForAzRole

This attribute is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function. It specifies a list of tasks for Az-Role.

```
cn: ms-DS-Tasks-For-Az-Role
ldapDisplayName: msDS-TasksForAzRole
attributeId: 1.2.840.113556.1.4.1814
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 35319082-8c4a-4646-9386-c2949d49894d
systemOnly: FALSE
searchFlags: 0
linkID: 2024
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.466 Attribute msDS-TasksForAzRoleBL

This attribute specifies a back link from Az-Task to Az-Role objects linking to it. It is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function.

```
cn: ms-DS-Tasks-For-Az-Role-BL
ldapDisplayName: msDS-TasksForAzRoleBL
attributeId: 1.2.840.113556.1.4.1815
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: a0dcd536-5158-42fe-8c40-c00a7ad37959
systemOnly: TRUE
searchFlags: 0
linkID: 2025
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.467 Attribute msDS-TasksForAzTask

This attribute is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function. It specifies a list of tasks linked to Az-Task.

```
cn: ms-DS-Tasks-For-Az-Task
ldapDisplayName: msDS-TasksForAzTask
attributeId: 1.2.840.113556.1.4.1810
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: b11c8ee2-5fcd-46a7-95f0-f38333f096cf
systemOnly: FALSE
searchFlags: 0
linkID: 2020
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.468 Attribute msDS-TasksForAzTaskBL

This attribute specifies a back link from Az-Task to the Az-Task objects linking to it. It is used by the Authorization Manager feature of Windows Server 2003 and is not necessary for Active Directory to function.

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```
cn: ms-DS-Tasks-For-Az-Task-BL
ldapDisplayName: msDS-TasksForAzTaskBL
attributeId: 1.2.840.113556.1.4.1811
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: df446e52-b5fa-4ca2-a42f-13f98a526c8f
systemOnly: TRUE
searchFlags: 0
linkID: 2021
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.469 Attribute msDS-TDOEgressBL

This attribute is the back link to the TDO egress rules link on an object.

```
cn: ms-DS-TDO-Egress-BL
ldapDisplayName: msDS-TDOEgressBL
attributeId: 1.2.840.113556.1.4.2194
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: d5006229-9913-2242-8b17-83761d1e0e5b
linkID: 2193
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR NOT REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.470 Attribute msDS-TDOIngressBL

This attribute is the back link to the TDO ingress rules link on an object.

```
cn: ms-DS-TDO-Ingress-BL
ldapDisplayName: msDS-TDOIngressBL
attributeId: 1.2.840.113556.1.4.2193
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 5a5661a1-97c6-544b-8056-e430fe7bc554
linkID: 2191
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.471 Attribute msds-tokenGroupNames

This attribute contains the distinguished names of security groups that the principal is directly or indirectly a member of.

```
cn: ms-DS-Token-Group-Names
ldapDisplayName: msds-tokenGroupNames
attributeId: 1.2.840.113556.1.4.2345
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
systemOnly: TRUE
schemaIdGuid: 65650576-4699-4fc9-8d18-26e0cd0137a6
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
searchFlags: fBASEONLY
systemFlags: FLAG ATTR NOT REPLICATED | FLAG ATTR IS CONSTRUCTED |
 FLAG ATTR IS OPERATIONAL | FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.472 Attribute msds-tokenGroupNamesGlobalAndUniversal

This attribute contains the distinguished names of global and universal security groups the principal is directly or indirectly a member of.

```
cn: ms-DS-Token-Group-Names-Global-And-Universal
ldapDisplayName: msds-tokenGroupNamesGlobalAndUniversal
attributeId: 1.2.840.113556.1.4.2346
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
systemOnly: TRUE
schemaIdGuid: fa06d1f4-7922-4aad-b79c-b2201f54417c
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
searchFlags: fBASEONLY
systemFlags: FLAG_ATTR_NOT_REPLICATED | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG ATTR IS OPERATIONAL | FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.473 Attribute msds-tokenGroupNamesNoGCAcceptable

This attribute contains the distinguished names of security groups that the principal is directly or indirectly a member of as reported by the local DC.

```
cn: ms-DS-Token-Group-Names-No-GC-Acceptable
ldapDisplayName: msds-tokenGroupNamesNoGCAcceptable
attributeId: 1.2.840.113556.1.4.2347
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
systemOnly: TRUE
schemaIdGuid: 523fc6c8-9af4-4a02-9cd7-3dea129eeb27
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
searchFlags: fBASEONLY
systemFlags: FLAG_ATTR_NOT_REPLICATED | FLAG_ATTR_IS_CONSTRUCTED |
```


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```
 FLAG_ATTR_IS_OPERATIONAL | FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.474 Attribute msDS-TombstoneQuotaFactor

This attribute specifies the percentage factor by which tombstone object count is reduced for the purpose of quota accounting. ("Tombstoned" objects are objects that have been deleted but not yet removed from the directory.) For more information on how Active Directory uses this attribute, refer to [MS-ADTS].

```
cn: ms-DS-Tombstone-Quota-Factor
ldapDisplayName: msDS-TombstoneQuotaFactor
attributeId: 1.2.840.113556.1.4.1847
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 461744d7-f3b6-45ba-8753-fb9552a5df32
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 100
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.475 Attribute msDS-TopQuotaUsage

This attribute specifies the top quota users ordered by decreasing quota usage currently in the directory. For more information about this attribute, see [MS-ADTS] section 3.1.1.3.2.31.

```
cn: ms-DS-Top-Quota-Usage
ldapDisplayName: msDS-TopQuotaUsage
attributeId: 1.2.840.113556.1.4.1850
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7b7cce4f-f1f5-4bb6-b7eb-23504af19e75
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.476 Attribute msDS-TransformationRules

This attribute specifies the transformation rules for cross-forest claims transformation.

```
cn: ms-DS-Transformation-Rules
ldapDisplayName: msDS-TransformationRules
attributeId: 1.2.840.113556.1.4.2189
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
schemaIdGuid: 55872b71-c4b2-3b48-ae51-4095f91ec600
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.477 Attribute msDS-TransformationRulesCompiled

This attribute is a blob containing compiled transformation rules.

```
cn: ms-DS-Transformation-Rules-Compiled
ldapDisplayName: msDS-TransformationRulesCompiled
attributeId: 1.2.840.113556.1.4.2190
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: fCONFIDENTIAL
schemaIdGuid: 0bb49a10-536b-bc4d-a273-0bab0dd4bd10
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.478 Attribute msDS-TrustForestTrustInfo

This attribute specifies forest trust information (BLOB) that is used by the Active Directory system [MS-ADOD] for a trusted domain object (TDO). For more information about this attribute, see [MS-ADTS] section 6.1.6.9.3.

```
cn: ms-DS-Trust-Forest-Trust-Info
ldapDisplayName: msDS-TrustForestTrustInfo
attributeId: 1.2.840.113556.1.4.1702
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 29cc866e-49d3-4969-942e-1dbc0925d183
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.479 Attribute msDS-UpdateScript

This attribute stores an XML script that is generated during a domain rename operation.

```
cn: ms-DS-UpdateScript
ldapDisplayName: msDS-UpdateScript
attributeId: 1.2.840.113556.1.4.1721
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 146eb639-bb9f-4fc1-a825-e29e00c77920
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.480 Attribute msDS-User-Account-Control-Computed

This attribute specifies flags that control behavior of the user account. For more information, see [MS-ADTS] section 3.1.1.4.5.17.

```
cn: ms-DS-User-Account-Control-Computed
ldapDisplayName: msDS-User-Account-Control-Computed
attributeId: 1.2.840.113556.1.4.1460
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 2cc4b836-b63f-4940-8d23-ea7acf06af56
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.481 Attribute msDS-UserAllowedNTLMNetworkAuthentication

This attribute is used to determine if a user is allowed to authenticate using NTLM authentication.

```
cn: ms-DS-User-Allowed-NTLM-Network-Authentication
ldapDisplayName: msDS-UserAllowedNTLMNetworkAuthentication
attributeId: 1.2.840.113556.1.4.2348
```


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```
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
systemOnly: FALSE
schemaIdGuid: 7ece040f-9327-4cdc-aad3-037adfe62639
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2016.

2.482 Attribute msDS-UserAllowedToAuthenticateFrom

This attribute is used to determine whether a user has permission to authenticate from a computer.

```
cn: ms-DS-User-Allowed-To-Authenticate-From
ldapDisplayName: msDS-UserAllowedToAuthenticateFrom
attributeId: 1.2.840.113556.1.4.2278
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 2c4c9600-b0e1-447d-8dda-74902257bdb5
systemOnly: FALSE
searchFlags: 0
RangeLower: 0
RangeUpper: 132096
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.483 Attribute msDS-UserAllowedToAuthenticateTo

This attribute is used to determine whether a user has permission to authenticate to a service.

```
cn: ms-DS-User-Allowed-To-Authenticate-To
ldapDisplayName: msDS-UserAllowedToAuthenticateTo
attributeId: 1.2.840.113556.1.4.2277
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: de0caa7f-724e-4286-b179-192671efc664
systemOnly: FALSE
searchFlags: 0
RangeLower: 0
RangeUpper: 132096
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.484 Attribute msDS-UserAuthNPolicy

This attribute specifies which AuthNPolicy is applied to users assigned to this silo object.

```
cn: ms-DS-User-AuthN-Policy
ldapDisplayName: msDS-UserAuthNPolicy
attributeId: 1.2.840.113556.1.4.2289
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
```


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```
isSingleValued: TRUE
schemaIdGuid: cd26b9f3-d415-442a-8f78-7c61523ee95b
systemOnly: FALSE
searchFlags: 0
linkID: 2206
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.485 Attribute msDS-UserAuthNPolicyBL

This attribute is the backlink for msDS-UserAuthNPolicy.

```
cn: ms-DS-User-AuthN-Policy-BL
ldapDisplayName: msDS-UserAuthNPolicyBL
attributeId: 1.2.840.113556.1.4.2290
attributeSyntax: 2.5.5.1
omObjectClass: 1.3.12.2.1011.28.0.714
omSyntax: 127
isSingleValued: FALSE
schemaIdGuid: 2f17faa9-5d47-4b1f-977e-aa52fabe65c8
systemOnly: TRUE
searchFlags: 0
linkID: 2207
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.486 Attribute msDS-UserPasswordExpiryTimeComputed

This attribute contains the expiry time for the user's current password.

```
cn: ms-DS-User-Password-Expiry-Time-Computed
ldapDisplayName: msDS-UserPasswordExpiryTimeComputed
attributeId: 1.2.840.113556.1.4.1996
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: add5cf10-7b09-4449-9ae6-2534148f8a72
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.487 Attribute msDS-UserTGTLifetime

This attribute specifies the maximum age of a Kerberos TGT issued to a user in units of 10^(-7) seconds.

```
cn: ms-DS-User-TGT-Lifetime
ldapDisplayName: msDS-UserTGTLifetime
attributeId: 1.2.840.113556.1.4.2279
attributeSyntax: 2.5.5.16
omSyntax: 65
```


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```
isSingleValued: TRUE
schemaIdGuid: 8521c983-f599-420f-b9ab-b1222bdf95c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012 R2 and Windows Server 2016.

2.488 Attribute msDS-USNLastSyncSuccess

The update sequence number (USN) at which the last successful replication synchronization occurred.

```
cn: ms-DS-USN-Last-Sync-Success
ldapDisplayName: msDS-USNLastSyncSuccess
attributeId: 1.2.840.113556.1.4.2055
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 31f7b8b6-c9f8-4f2d-a37b-58a823030331
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR NOT REPLICATED | FLAG ATTR IS OPERATIONAL
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.489 Attribute msDS-ValueTypeReference

This attribute is used to link a resource property object to its value type.

```
cn: ms-DS-Value-Type-Reference
ldapDisplayName: msDS-ValueTypeReference
attributeId: 1.2.840.113556.1.4.2187
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 78fc5d84-c1dc-3148-8984-58f792d41d3e
linkID: 2188
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.490 Attribute msDS-ValueTypeReferenceBL

This attribute is the back link for msDS-ValueTypeReference. It links a value type object back to resource properties.

```
cn: ms-DS-Value-Type-Reference-BL
ldapDisplayName: msDS-ValueTypeReferenceBL
attributeId: 1.2.840.113556.1.4.2188
attributeSyntax: 2.5.5.1
omSyntax: 127
```


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```
isSingleValued: FALSE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: ab5543ad-23a1-3b45-b937-9b313d5474a8
linkID: 2189
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.491 Attribute msExchAssistantName

This attribute is used by Exchange Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-Exch-Assistant-Name
ldapDisplayName: msExchAssistantName
attributeId: 1.2.840.113556.1.2.444
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a8df7394-c5ea-11d1-bbcb-0080c76670c0
searchFlags: 0
rangeLower: 1
rangeUpper: 256
mapiID: 14896
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.492 Attribute msExchHouseIdentifier

This attribute specifies a physical address for a contact in an Exchange Server address book.

```
cn: ms-Exch-House-Identifier
ldapDisplayName: msExchHouseIdentifier
attributeId: 1.2.840.113556.1.2.596
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a8df7407-c5ea-11d1-bbcb-0080c76670c0
searchFlags: 0
rangeLower: 1
rangeUpper: 128
mapiID: 35924
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.493 Attribute msExchLabeledURI

This attribute is used by Exchange Server. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: ms-Exch-LabeledURI
ldapDisplayName: msExchLabeledURI
attributeId: 1.2.840.113556.1.2.593
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 16775820-47f3-11d1-a9c3-0000f80367c1
searchFlags: 0
rangeLower: 1
rangeUpper: 1024
mapiID: 35921
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.494 Attribute msFRS-Hub-Member

This attribute specifies a value used by the File Replication Service.

```
cn: ms-FRS-Hub-Member
ldapDisplayName: msFRS-Hub-Member
attributeId: 1.2.840.113556.1.4.1693
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 5643ff81-35b6-4ca9-9512-baf0bd0a2772
searchFlags: 0
linkID: 1046
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.495 Attribute msFRS-Topology-Pref

This attribute specifies a value used by the File Replication Service.

```
cn: ms-FRS-Topology-Pref
ldapDisplayName: msFRS-Topology-Pref
attributeId: 1.2.840.113556.1.4.1692
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 92aa27e0-5c50-402d-9ec1-ee847def9788
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.496 Attribute msFVE-KeyPackage

This attribute contains a volume's BitLocker encryption key secured by the corresponding recovery password. Full Volume Encryption (FVE) was the prerelease name for BitLocker Drive Encryption.

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```
cn: ms-FVE-KeyPackage
ldapDisplayName: msFVE-KeyPackage
attributeId: 1.2.840.113556.1.4.1999
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
rangeUpper: 102400
schemaIdGuid: 1fd55ea8-88a7-47dc-8129-0daa97186a54
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL | fCOPY |
 fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.497 Attribute msFVE-RecoveryGuid

This attribute contains the GUID associated with a BitLocker recovery password. Full Volume Encryption (FVE) was the prerelease name for BitLocker Drive Encryption.

```
cn: ms-FVE-RecoveryGuid
ldapDisplayName: msFVE-RecoveryGuid
attributeId: 1.2.840.113556.1.4.1965
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: f76909bc-e678-47a0-b0b3-f86a0044c06d
searchFlags: fCOPY | fPRESERVEONDELETE | fPDNTATTINDEX | fATTINDEX
rangeUpper: 128
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.498 Attribute msFVE-RecoveryPassword

This attribute contains a password that can recover a BitLocker-encrypted volume. Full Volume Encryption (FVE) was the prerelease name for BitLocker Drive Encryption.

```
cn: ms-FVE-RecoveryPassword
ldapDisplayName: msFVE-RecoveryPassword
attributeId: 1.2.840.113556.1.4.1964
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
rangeUpper: 256
schemaIdGuid: 43061ac1-c8ad-4ccc-b785-2bfac20fc60a
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL | fCOPY |
 fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.499 Attribute msFVE-VolumeGuid

This attribute contains the GUID associated with a BitLocker-supported disk volume. Full Volume Encryption (FVE) was the prerelease name for BitLocker Drive Encryption.

```
cn: ms-FVE-VolumeGuid
ldapDisplayName: msFVE-VolumeGuid
attributeId: 1.2.840.113556.1.4.1998
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
searchFlags: fCOPY | fPRESERVEONDELETE | fPDNTATTINDEX | fATTINDEX
rangeUpper: 128
schemaIdGuid: 85e5a5cf-dcee-4075-9cfd-ac9db6a2f245
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.500 Attribute msieee80211-Data

This attribute specifies the network configurations for wireless support.

```
cn: ms-ieee-80211-Data
ldapDisplayName: msieee80211-Data
attributeId: 1.2.840.113556.1.4.1821
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 0e0d0938-2658-4580-a9f6-7a0ac7b566cb
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.501 Attribute msieee80211-DataType

This attribute specifies the network configurations for wireless support.

```
cn: ms-ieee-80211-Data-Type
ldapDisplayName: msieee80211-DataType
attributeId: 1.2.840.113556.1.4.1822
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 6558b180-35da-4efe-beed-521f8f48cafb
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.502 Attribute msieee80211-ID

This attribute specifies the network configurations for wireless support.

```
cn: ms-ieee-80211-ID
ldapDisplayName: msieee80211-ID
attributeId: 1.2.840.113556.1.4.1823
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7f73ef75-14c9-4c23-81de-dd07a06f9e8b
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.503 Attribute msiFileList

For a given Active Directory domain, this attribute specifies a list of Microsoft installer files, such as the base MSI file (.msi) and MST transform files (.mst).

```
cn: Msi-File-List
ldapDisplayName: msiFileList
attributeId: 1.2.840.113556.1.4.671
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7bfdcb7d-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.504 Attribute msIIS-FTPDir

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-IIS-FTP-Dir
ldapDisplayName: msIIS-FTPDir
attributeId: 1.2.840.113556.1.4.1786
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8a5c99e9-2230-46eb-b8e8-e59d712eb9ee
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.505 Attribute msIIS-FTPRoot

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-IIS-FTP-Root
ldapDisplayName: msIIS-FTPRoot
attributeId: 1.2.840.113556.1.4.1785
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a7827a4-1483-49a5-9d84-52e3812156b4
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.506 Attribute msImaging-HashAlgorithm

This attribute contains the name of the hash algorithm used to create the thumbprint hash for the Scan Repository/Secure Print device.

```
cn: ms-Imaging-Hash-Algorithm
ldapDisplayName: msImaging-HashAlgorithm
attributeId: 1.2.840.113556.1.4.2181
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 64
schemaIdGuid: 8ae70db5-6406-4196-92fe-f3bb557520a7
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.507 Attribute msImaging-PSPIdentifier

This attribute contains the unique identifier for this PostScan Process.

```
cn: ms-Imaging-PSP-Identifier
ldapDisplayName: msImaging-PSPIdentifier
attributeId: 1.2.840.113556.1.4.2053
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 51583ce9-94fa-4b12-b990-304c35b18595
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.508 Attribute msImaging-PSPString

This attribute contains the XML sequence for this PostScan Process.

```
cn: ms-Imaging-PSP-String
ldapDisplayName: msImaging-PSPString
attributeId: 1.2.840.113556.1.4.2054
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7b6760ae-d6ed-44a6-b6be-9de62c09ec67
searchFlags: 0
rangeUpper: 524288
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.509 Attribute msImaging-ThumbprintHash

This attribute contains a hash of the security certificate for the Scan Repository/Secure Print device.

```
cn: ms-Imaging-Thumbprint-Hash
ldapDisplayName: msImaging-ThumbprintHash
attributeId: 1.2.840.113556.1.4.2180
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
schemaIdGuid: 9cdfdbc5-0304-4569-95f6-c4f663fe5ae6
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.510 Attribute msiScript

For a given application, this attribute specifies the Microsoft Installer (MSI) script.

```
cn: Msi-Script
ldapDisplayName: msiScript
attributeId: 1.2.840.113556.1.4.814
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: d9e18313-8939-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.511 Attribute msiScriptName

For a given application, this attribute specifies the MSI script name.

```
cn: Msi-Script-Name
ldapDisplayName: msiScriptName
attributeId: 1.2.840.113556.1.4.845
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 96a7dd62-9118-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.512 Attribute msiScriptPath

For a given application, this attribute specifies the MSI script file path.

```
cn: Msi-Script-Path
ldapDisplayName: msiScriptPath
attributeId: 1.2.840.113556.1.4.15
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967937-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.513 Attribute msiScriptSize

For a given application, this attribute specifies the MSI script file size.

```
cn: Msi-Script-Size
ldapDisplayName: msiScriptSize
attributeId: 1.2.840.113556.1.4.846
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 96a7dd63-9118-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.514 Attribute msKds-CreateTime

This attribute contains the time when this root key was created.

```
cn: ms-Kds-CreateTime
ldapDisplayName: msKds-CreateTime
attributeId: 1.2.840.113556.1.4.2179
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
schemaIdGuid: ae18119f-6390-0045-b32d-97dbc701aef7
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.515 Attribute msKds-DomainID

This attribute holds the distinguished name of the domain controller that generated this root key.

```
cn: ms-Kds-DomainID
ldapDisplayName: msKds-DomainID
attributeId: 1.2.840.113556.1.4.2177
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 96400482-cf07-e94c-90e8-f2efc4f0495e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.516 Attribute msKds-KDFAlgorithmID

This attribute contains the algorithm name of the key derivation function used to compute keys.

```
cn: ms-Kds-KDF-AlgorithmID
ldapDisplayName: msKds-KDFAlgorithmID
attributeId: 1.2.840.113556.1.4.2169
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
rangeUpper: 200
schemaIdGuid: db2c48b2-d14d-ec4e-9f58-ad579d8b440e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.517 Attribute msKds-KDFParam

This attribute holds parameters for the key derivation algorithm.

```
cn: ms-Kds-KDF-Param
ldapDisplayName: msKds-KDFParam
attributeId: 1.2.840.113556.1.4.2170
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
rangeUpper: 2000
schemaIdGuid: 8a800772-f4b8-154f-b41c-2e4271eff7a7
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.518 Attribute msKds-PrivateKeyLength

This attribute contains the length of the secret agreement private key.

```
cn: ms-Kds-PrivateKey-Length
ldapDisplayName: msKds-PrivateKeyLength
attributeId: 1.2.840.113556.1.4.2174
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
schemaIdGuid: 615f42a1-37e7-1148-a0dd-3007e09cfc81
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.519 Attribute msKds-PublicKeyLength

This attribute contains the length of the secret agreement public key.

```
cn: ms-Kds-PublicKey-Length
ldapDisplayName: msKds-PublicKeyLength
attributeId: 1.2.840.113556.1.4.2173
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
schemaIdGuid: e338f470-39cd-4549-ab5b-f69f9e583fe0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.520 Attribute msKds-RootKeyData

This attribute contains the data for the root key.

```
cn: ms-Kds-RootKeyData
ldapDisplayName: msKds-RootKeyData
attributeId: 1.2.840.113556.1.4.2175
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
rangeUpper: 128
schemaIdGuid: 26627c27-08a2-0a40-a1b1-8dce85b42993
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.521 Attribute msKds-SecretAgreementAlgorithmID

This attribute contains the name of the secret agreement algorithm to be used with public keys.

```
cn: ms-Kds-SecretAgreement-AlgorithmID
ldapDisplayName: msKds-SecretAgreementAlgorithmID
attributeId: 1.2.840.113556.1.4.2171
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
rangeUpper: 200
schemaIdGuid: 1702975d-225e-cb4a-b15d-0daea8b5e990
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.522 Attribute msKds-SecretAgreementParam

This attribute holds the parameters for the secret agreement algorithm.

```
cn: ms-Kds-SecretAgreement-Param
ldapDisplayName: msKds-SecretAgreementParam
attributeId: 1.2.840.113556.1.4.2172
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
rangeUpper: 2000
schemaIdGuid: 30b099d9-edfe-7549-b807-eba444da79e9
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.523 Attribute msKds-UseStartTime

This attribute contains the time after which a root key can be used.

```
cn: ms-Kds-UseStartTime
ldapDisplayName: msKds-UseStartTime
attributeId: 1.2.840.113556.1.4.2178
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
schemaIdGuid: 6cdc047f-f522-b74a-9a9c-d95ac8cdfda2
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.524 Attribute msKds-Version

This attribute holds the version number of this root key.

```
cn: ms-Kds-Version
ldapDisplayName: msKds-Version
attributeId: 1.2.840.113556.1.4.2176
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
schemaIdGuid: d5f07340-e6b0-1e4a-97be-0d3318bd9db1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.525 Attribute MSMQ-MulticastAddress

For a given Microsoft Message Queuing (MSMQ) object, this attribute specifies the multicast address associated with the queue.

```
cn: MSMQ-Multicast-Address
ldapDisplayName: MSMQ-MulticastAddress
attributeId: 1.2.840.113556.1.4.1714
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1d2f4412-f10d-4337-9b48-6e5b125cd265
systemOnly: FALSE
searchFlags: 0
rangeLower: 9
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.526 Attribute msMQ-Recipient-FormatName

For a given MSMQ object, this attribute specifies the recipient format name of a queue.

```
cn: MSMQ-Recipient-FormatName
ldapDisplayName: msMQ-Recipient-FormatName
attributeId: 1.2.840.113556.1.4.1695
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3bfe6748-b544-485a-b067-1b310c4334bf
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 255
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.527 Attribute MSMQ-SecuredSource

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MSMQ-Secured-Source
ldapDisplayName: MSMQ-SecuredSource
attributeId: 1.2.840.113556.1.4.1713
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 8bf0221b-7a06-4d63-91f0-1499941813d3
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.528 Attribute mSMQAuthenticate

For a given MSMQ object, this attribute specifies whether authenticated messages are accepted.

```
cn: MSMQ-Authenticate
ldapDisplayName: mSMQAuthenticate
attributeId: 1.2.840.113556.1.4.923
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 9a0dc326-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.529 Attribute mSMQBasePriority

For a given MSMQ object, this attribute specifies the base priority of messages transmitted to this queue.

```
cn: MSMQ-Base-Priority
ldapDisplayName: mSMQBasePriority
attributeId: 1.2.840.113556.1.4.920
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc323-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.530 Attribute mSMQComputerType

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MSMQ-Computer-Type
ldapDisplayName: mSMQComputerType
attributeId: 1.2.840.113556.1.4.933
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: TRUE
schemaIdGuid: 9a0dc32e-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.531 Attribute mSMQComputerTypeEx

For a given MSMQ object, this attribute specifies the operating system and MSMQ version.

```
cn: MSMQ-Computer-Type-Ex
ldapDisplayName: mSMQComputerTypeEx
attributeId: 1.2.840.113556.1.4.1417
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 18120de8-f4c4-4341-bd95-32eb5bcf7c80
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.532 Attribute mSMQCost

For a given MSMQ object, this attribute specifies the cost of routing between two MSMQ endpoints.

```
cn: MSMQ-Cost
ldapDisplayName: mSMQCost
attributeId: 1.2.840.113556.1.4.946
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc33a-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.533 Attribute mSMQCSPName

For a given MSMQ object, this attribute specifies the type of cryptographic provider used by MSMQ for a given Active Directory domain.

```
cn: MSMQ-CSP-Name
ldapDisplayName: mSMQCSPName
attributeId: 1.2.840.113556.1.4.940
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: TRUE
schemaIdGuid: 9a0dc334-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.534 Attribute mSMQDependentClientService

For a given server, this attribute specifies whether this server can be a supporting MSMQ server for dependent clients.

```
cn: MSMQ-Dependent-Client-Service
ldapDisplayName: mSMQDependentClientService
attributeId: 1.2.840.113556.1.4.1239
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 2df90d83-009f-11d2-aa4c-00c04fd7d83a
```


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```
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.535 Attribute mSMQDependentClientServices

For a given server, this attribute specifies whether the Microsoft Message Queuing service installed on the server provides MSMQ-dependent client services.

```
cn: MSMQ-Dependent-Client-Services
ldapDisplayName: mSMQDependentClientServices
attributeId: 1.2.840.113556.1.4.1226
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 2df90d76-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.536 Attribute mSMQDigests

For a given MSMQ object, this attribute specifies an array of digests used by MSMQ.

```
cn: MSMQ-Digests
ldapDisplayName: mSMQDigests
attributeId: 1.2.840.113556.1.4.948
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 9a0dc33c-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.537 Attribute mSMQDigestsMig

For a given MSMQ object, this attribute is to be empty.

```
cn: MSMQ-Digests-Mig
```


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```
ldapDisplayName: mSMQDigestsMig
attributeId: 1.2.840.113556.1.4.966
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 0f71d8e0-da3b-11d1-90a5-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the value of this attribute is set to the value of mSMQDigests attribute when the MSMQ object is created.

2.538 Attribute mSMQDsService

For a given MSMQ object, this attribute specifies whether the MSMQ server provides access to Active Directory.

```
cn: MSMQ-Ds-Service
ldapDisplayName: mSMQDsService
attributeId: 1.2.840.113556.1.4.1238
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 2df90d82-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.539 Attribute mSMQDsServices

For a given MSMQ object, this attribute specifies whether the MSMQ server provides access to Active Directory.

```
cn: MSMQ-Ds-Services
ldapDisplayName: mSMQDsServices
attributeId: 1.2.840.113556.1.4.1228
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 2df90d78-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.540 Attribute mSMQEncryptKey

For a given MSMQ object, this attribute specifies the computer's public key certificate used for encryption.

```
cn: MSMQ-Encrypt-Key
ldapDisplayName: mSMQEncryptKey
attributeId: 1.2.840.113556.1.4.936
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc331-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.541 Attribute mSMQForeign

For a given MSMQ object, this attribute specifies whether the queue manager is a foreign system that services foreign queues.

```
cn: MSMQ-Foreign
ldapDisplayName: mSMQForeign
attributeId: 1.2.840.113556.1.4.934
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 9a0dc32f-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.542 Attribute mSMQInRoutingServers

For a given MSMQ object, this attribute specifies the distinguished names of MSMQ routing servers through which all incoming traffic to the server is routed.

```
cn: MSMQ-In-Routing-Servers
ldapDisplayName: mSMQInRoutingServers
attributeId: 1.2.840.113556.1.4.929
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 9a0dc32c-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.543 Attribute mSMQInterval1

For a given MSMQ object, this attribute specifies the default replication time within an MSMQ site.

```
cn: MSMQ-Interval1
ldapDisplayName: mSMQInterval1
attributeId: 1.2.840.113556.1.4.1308
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8ea825aa-3b7b-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.544 Attribute mSMQInterval2

For a given MSMQ object, this attribute specifies the default replication time between MSMQ sites.

```
cn: MSMQ-Interval2
ldapDisplayName: mSMQInterval2
attributeId: 1.2.840.113556.1.4.1309
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 99b88f52-3b7b-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.545 Attribute mSMQJournal

For a given MSMQ object, this attribute specifies how MSMQ tracks messages removed from the queue.

```
cn: MSMQ-Journal
ldapDisplayName: mSMQJournal
attributeId: 1.2.840.113556.1.4.918
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 9a0dc321-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.546 Attribute mSMQJournalQuota

For a given MSMQ object, this attribute specifies the journal storage quota.

```
cn: MSMQ-Journal-Quota
ldapDisplayName: mSMQJournalQuota
attributeId: 1.2.840.113556.1.4.921
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc324-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.547 Attribute mSMQLabel

This attribute has been superseded by the mSMQLabelEx attribute.

```
cn: MSMQ-Label
ldapDisplayName: mSMQLabel
attributeId: 1.2.840.113556.1.4.922
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: TRUE
schemaIdGuid: 9a0dc325-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 124
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.548 Attribute mSMQLabelEx

For a given MSMQ object, this attribute specifies a descriptive label for a queue.

```
cn: MSMQ-Label-Ex
ldapDisplayName: mSMQLabelEx
attributeId: 1.2.840.113556.1.4.1415
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4580ad25-d407-48d2-ad24-43e6e56793d7
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
```


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```
rangeUpper: 124
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.549 Attribute mSMQLongLived

For a given MSMQ object, this attribute specifies the default value for the length of time a message has to reach a queue.

```
cn: MSMQ-Long-Lived
ldapDisplayName: mSMQLongLived
attributeId: 1.2.840.113556.1.4.941
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc335-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.550 Attribute mSMQMigrated

For a given MSMQ object, this attribute specifies information used for MSMQ migration.

```
cn: MSMQ-Migrated
ldapDisplayName: mSMQMigrated
attributeId: 1.2.840.113556.1.4.952
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 9a0dc33f-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.551 Attribute mSMQNameStyle

For a given MSMQ object, this attribute specifies whether weakened security is enabled.

```
cn: MSMQ-Name-Style
ldapDisplayName: mSMQNameStyle
attributeId: 1.2.840.113556.1.4.939
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
```


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```
schemaIdGuid: 9a0dc333-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.552 Attribute mSMQNt4Flags

For a given MSMQ object, this attribute specifies whether the server is MSMQ 1.0.

```
cn: MSMQ-Nt4-Flags
ldapDisplayName: mSMQNt4Flags
attributeId: 1.2.840.113556.1.4.964
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: eb38a158-d57f-11d1-90a2-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.553 Attribute mSMQNt4Stub

For a given MSMQ object, this attribute specifies whether the server was migrated from an MSMQ 1.0 database.

```
cn: MSMQ-Nt4-Stub
ldapDisplayName: mSMQNt4Stub
attributeId: 1.2.840.113556.1.4.960
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: 6f914be6-d57e-11d1-90a2-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.554 Attribute mSMQOSType

For a given MSMQ object, this attribute specifies the operating system type of the queue manager.

```
cn: MSMQ-OS-Type
ldapDisplayName: mSMQOSType
attributeId: 1.2.840.113556.1.4.935
attributeSyntax: 2.5.5.9
omSyntax: 2
```


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```
isSingleValued: TRUE
schemaIdGuid: 9a0dc330-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.555 Attribute mSMQOutRoutingServers

For a given MSMQ object, this attribute specifies the distinguished names of the MSMQ routing servers through which outgoing traffic is routed.

```
cn: MSMQ-Out-Routing-Servers
ldapDisplayName: mSMQOutRoutingServers
attributeId: 1.2.840.113556.1.4.928
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 9a0dc32b-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.556 Attribute mSMQOwnerID

For a given MSMQ object, this attribute specifies the GUID of the MSMQ server that owns the queue.

```
cn: MSMQ-Owner-ID
ldapDisplayName: mSMQOwnerID
attributeId: 1.2.840.113556.1.4.925
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc328-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE | fATTINDEX
rangeLower: 16
rangeUpper: 16
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.557 Attribute mSMQPrevSiteGates

This attribute was intended for use by MSMQ.

```
cn: MSMQ-Prev-Site-Gates
ldapDisplayName: mSMQPrevSiteGates
attributeId: 1.2.840.113556.1.4.1225
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 2df90d75-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.558 Attribute mSMQPrivacyLevel

For a given MSMQ object, this attribute specifies the privacy level of the queue.

```
cn: MSMQ-Privacy-Level
ldapDisplayName: mSMQPrivacyLevel
attributeId: 1.2.840.113556.1.4.924
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: TRUE
schemaIdGuid: 9a0dc327-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.559 Attribute mSMQQMID

For a given MSMQ object, this attribute contains the GUID of the server's MSMQ configuration object.

```
cn: MSMQ-QM-ID
ldapDisplayName: mSMQQMID
attributeId: 1.2.840.113556.1.4.951
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc33e-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.560 Attribute mSMQQueueJournalQuota

For a given MSMQ object, this attribute contains the maximum size of the queue journal.

```
cn: MSMQ-Queue-Journal-Quota
ldapDisplayName: mSMQQueueJournalQuota
attributeId: 1.2.840.113556.1.4.963
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8e441266-d57f-11d1-90a2-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.561 Attribute mSMQQueueNameExt

For a given MSMQ object, this attribute contains the suffix of the queue name if the name exceeds 64 characters.

```
cn: MSMQ-Queue-Name-Ext
ldapDisplayName: mSMQQueueNameExt
attributeId: 1.2.840.113556.1.4.1243
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2df90d87-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 92
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.562 Attribute mSMQQueueQuota

For a given MSMQ object, this attribute contains the maximum size of the queue.

```
cn: MSMQ-Queue-Quota
ldapDisplayName: mSMQQueueQuota
attributeId: 1.2.840.113556.1.4.962
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 3f6b8e12-d57f-11d1-90a2-00c04fd91ab1
systemOnly: FALSE
```


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```
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.563 Attribute mSMQQueueType

For a given MSMQ object, this attribute specifies the type of service that the queue provides.

```
cn: MSMQ-Queue-Type
ldapDisplayName: mSMQQueueType
attributeId: 1.2.840.113556.1.4.917
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc320-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.564 Attribute mSMQQuota

For a given MSMQ object, this attribute specifies the disk quota for all queues located at the queue manager.

```
cn: MSMQ-Quota
ldapDisplayName: mSMQQuota
attributeId: 1.2.840.113556.1.4.919
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc322-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.565 Attribute mSMQRoutingService

For a given MSMQ object, this attribute specifies whether the server is a routing server.

```
cn: MSMQ-Routing-Service
ldapDisplayName: mSMQRoutingService
attributeId: 1.2.840.113556.1.4.1237
```


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```
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 2df90d81-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.566 Attribute mSMQRoutingServices

For a given MSMQ object, this attribute specifies whether the queue manager is configured as a routing server.

```
cn: MSMQ-Routing-Services
ldapDisplayName: mSMQRoutingServices
attributeId: 1.2.840.113556.1.4.1227
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 2df90d77-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.567 Attribute mSMQServices

For a given MSMQ object, this attribute specifies the type of service.

```
cn: MSMQ-Services
ldapDisplayName: mSMQServices
attributeId: 1.2.840.113556.1.4.950
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc33d-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.568 Attribute mSMQServiceType

For a given MSMQ object, this attribute specifies the type of service.

```
cn: MSMQ-Service-Type
```


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```
ldapDisplayName: mSMQServiceType
attributeId: 1.2.840.113556.1.4.930
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc32d-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.569 Attribute mSMQSignCertificates

For a given MSMQ object, this attribute contains an array of certificates.

```
cn: MSMQ-Sign-Certificates
ldapDisplayName: mSMQSignCertificates
attributeId: 1.2.840.113556.1.4.947
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc33b-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1048576
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the rangeUpper attribute is not defined.

2.570 Attribute mSMQSignCertificatesMig

For a given MSMQ object, this attribute is to be empty.

```
cn: MSMQ-Sign-Certificates-Mig
ldapDisplayName: mSMQSignCertificatesMig
attributeId: 1.2.840.113556.1.4.967
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 3881b8ea-da3b-11d1-90a5-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1048576
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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In Windows 2000 Server, the rangeUpper attribute is not defined, and the value of this attribute is set to the value of the mSMQSignCertificates attribute when the MSMQ object is created.

2.571 Attribute mSMQSignKey

For a given MSMQ object, this attribute specifies the computer's public key certificate used for signing.

```
cn: MSMQ-Sign-Key
ldapDisplayName: mSMQSignKey
attributeId: 1.2.840.113556.1.4.937
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc332-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.572 Attribute mSMQSite1

For a given MSMQ object, this attribute contains the GUID of a routing site.

```
cn: MSMQ-Site-1
ldapDisplayName: mSMQSite1
attributeId: 1.2.840.113556.1.4.943
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 9a0dc337-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.573 Attribute mSMQSite2

For a given MSMQ object, this attribute contains the GUID of a routing site.

```
cn: MSMQ-Site-2
ldapDisplayName: mSMQSite2
attributeId: 1.2.840.113556.1.4.944
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 9a0dc338-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.574 Attribute mSMQSiteForeign

For a given MSMQ object, this attribute specifies whether a site is an external messaging system.

```
cn: MSMQ-Site-Foreign
ldapDisplayName: mSMQSiteForeign
attributeId: 1.2.840.113556.1.4.961
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: FALSE
schemaIdGuid: fd129d8a-d57e-11d1-90a2-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.575 Attribute mSMQSiteGates

For a given MSMQ object, this attribute contains the GUIDs of the MSMQ configuration objects of the servers that are site gates on the link.

```
cn: MSMQ-Site-Gates
ldapDisplayName: mSMQSiteGates
attributeId: 1.2.840.113556.1.4.945
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 9a0dc339-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.576 Attribute mSMQSiteGatesMig

For a given MSMQ object, this attribute contains the previous value of the mSMQSiteGates attribute.

```
cn: MSMQ-Site-Gates-Mig
ldapDisplayName: mSMQSiteGatesMig
attributeId: 1.2.840.113556.1.4.1310
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: e2704852-3b7b-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.577 Attribute mSMQSiteID

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: MSMQ-Site-ID
ldapDisplayName: mSMQSiteID
attributeId: 1.2.840.113556.1.4.953
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 9a0dc340-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.578 Attribute mSMQSiteName

For a given MSMQ object, this attribute contains the name of a site. This attribute has been superseded by the mSMQSiteNameEx attribute.

```
cn: MSMQ-Site-Name
ldapDisplayName: mSMQSiteName
attributeId: 1.2.840.113556.1.4.965
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: TRUE
schemaIdGuid: ffadb4b2-de39-11d1-90a5-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.579 Attribute mSMQSiteNameEx

For a given MSMQ object, this attribute contains the name of a site.

```
cn: MSMQ-Site-Name-Ex
ldapDisplayName: mSMQSiteNameEx
attributeId: 1.2.840.113556.1.4.1416
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 422144fa-c17f-4649-94d6-9731ed2784ed
```


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```
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.580 Attribute mSMQSites

For a given MSMQ object, this attribute contains the site identifiers for sites to which the server belongs.

```
cn: MSMQ-Sites
ldapDisplayName: mSMQSites
attributeId: 1.2.840.113556.1.4.927
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 9a0dc32a-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.581 Attribute mSMQTransactional

This attribute specifies, for a queue in MSMQ, the transaction level of the queue.

```
cn: MSMQ-Transactional
ldapDisplayName: mSMQTransactional
attributeId: 1.2.840.113556.1.4.926
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 9a0dc329-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.582 Attribute mSMQUserSid

For a given MSMQ object, this attribute contains the SID of a migrated user.

```
cn: MSMQ-User-Sid
ldapDisplayName: mSMQUserSid
```


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```
attributeId: 1.2.840.113556.1.4.1337
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: c58aae32-56f9-11d2-90d0-00c04fd91ab1
systemOnly: TRUE
searchFlags: 0
rangeLower: 0
rangeUpper: 128
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the following attributes are defined differently.

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

2.583 Attribute mSMQVersion

For a given MSMQ object, this attribute contains the version number of the MSMQ information.

```
cn: MSMQ-Version
ldapDisplayName: mSMQVersion
attributeId: 1.2.840.113556.1.4.942
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 9a0dc336-c100-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.584 Attribute msNPAllowDialin

For a given user or machine account, this attribute specifies whether the account has permission to dial in to the Remote Access Service from outside the corporate network.

```
cn: msNPAllowDialin
ldapDisplayName: msNPAllowDialin
attributeId: 1.2.840.113556.1.4.1119
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: db0c9085-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.585 Attribute msNPCalledStationID

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: msNPCalledStationID
ldapDisplayName: msNPCalledStationID
attributeId: 1.2.840.113556.1.4.1123
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: db0c9089-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.586 Attribute msNPCallingStationID

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: msNPCallingStationID
ldapDisplayName: msNPCallingStationID
attributeId: 1.2.840.113556.1.4.1124
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: db0c908a-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.587 Attribute msNPSavedCallingStationID

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: msNPSavedCallingStationID
ldapDisplayName: msNPSavedCallingStationID
attributeId: 1.2.840.113556.1.4.1130
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: db0c908e-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.588 Attribute msPKI-Cert-Template-OID

For the certificate authority (CA) for the Active Directory domain, this attribute specifies the object identifier for a certificate template.

```
cn: ms-PKI-Cert-Template-OID
ldapDisplayName: msPKI-Cert-Template-OID
attributeId: 1.2.840.113556.1.4.1436
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3164c36a-ba26-468c-8bda-c1e5cc256728
systemOnly: FALSE
searchFlags: 1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.589 Attribute msPKI-Certificate-Application-Policy

For the CA for the Active Directory domain, this attribute specifies application identifiers that can be found in a certificate.

```
cn: ms-PKI-Certificate-Application-Policy
ldapDisplayName: msPKI-Certificate-Application-Policy
attributeId: 1.2.840.113556.1.4.1674
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: dbd90548-aa37-4202-9966-8c537ba5ce32
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.590 Attribute msPKI-Certificate-Name-Flag

For the CA for the Active Directory domain, this attribute specifies flags to construct the subject name in an issued certificate.

```
cn: ms-PKI-Certificate-Name-Flag
ldapDisplayName: msPKI-Certificate-Name-Flag
attributeId: 1.2.840.113556.1.4.1432
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
```


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```
schemaIdGuid: ea1dddc4-60ff-416e-8cc0-17cee534bce7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.591 Attribute msPKI-Certificate-Policy

For the CA for the Active Directory domain, this attribute specifies the list of policy identifiers and (optional) certificate service providers (CSPs) in an issued certificate.

```
cn: ms-PKI-Certificate-Policy
ldapDisplayName: msPKI-Certificate-Policy
attributeId: 1.2.840.113556.1.4.1439
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 38942346-cc5b-424b-a7d8-6ffd12029c5f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.592 Attribute msPKI-CredentialRoamingTokens

This attribute stores the encrypted user credential token blobs for roaming.

```
cn: ms-PKI-Credential-Roaming-Tokens
ldapDisplayName: msPKI-CredentialRoamingTokens
attributeId: 1.2.840.113556.1.4.2050
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
showInAdvancedViewOnly: TRUE
schemaIdGuid: b7ff5a38-0818-42b0-8110-d3d154c97f24
attributeSecurityGUID: 91e647de-d96f-4b70-9557-d63ff4f3ccd8
searchFlags: fCONFIDENTIAL
linkID: 2162
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.593 Attribute msPKI-Enrollment-Flag

For the CA for the Active Directory domain, this attribute specifies enrollment flags for clients.

```
cn: ms-PKI-Enrollment-Flag
ldapDisplayName: msPKI-Enrollment-Flag
attributeId: 1.2.840.113556.1.4.1430
```


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```
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d15ef7d8-f226-46db-ae79-b34e560bd12c
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.594 Attribute msPKI-Enrollment-Servers

For the certificate authority (CA) for the Active Directory domain, this attribute specifies priority, authentication type, and URI of each certificate enrollment Web service.

```
cn: ms-PKI-Enrollment-Servers
ldapDisplayName: msPKI-Enrollment-Servers
attributeId: 1.2.840.113556.1.4.2076
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f22bd38f-a1d0-4832-8b28-0331438886a6
systemOnly: FALSE
rangeUpper: 65536
isMemberOfPartialAttributeSet: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.595 Attribute msPKI-Minimal-Key-Size

For the CA for the Active Directory domain, this attribute specifies the minimum private key size for a certificate.

```
cn: ms-PKI-Minimal-Key-Size
ldapDisplayName: msPKI-Minimal-Key-Size
attributeId: 1.2.840.113556.1.4.1433
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: e96a63f5-417f-46d3-be52-db7703c503df
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.596 Attribute msPKI-OID-Attribute

For the CA for the Active Directory domain, this attribute specifies the enterprise object identifier (OID).

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```
cn: ms-PKI-OID-Attribute
ldapDisplayName: msPKI-OID-Attribute
attributeId: 1.2.840.113556.1.4.1671
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8c9e1288-5028-4f4f-a704-76d026f246ef
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.597 Attribute msPKI-OID-CPS

For the CA for the Active Directory domain, this attribute specifies the certification practice statement (CPS).

```
cn: ms-PKI-OID-CPS
ldapDisplayName: msPKI-OID-CPS
attributeId: 1.2.840.113556.1.4.1672
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 5f49940e-a79f-4a51-bb6f-3d446a54dc6b
systemOnly: FALSE
searchFlags: 0
rangeUpper: 32768
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.598 Attribute msPKI-OID-User-Notice

For the CA for the Active Directory domain, this attribute specifies the user notice for the enterprise issuer policy OID.

```
cn: ms-PKI-OID-User-Notice
ldapDisplayName: msPKI-OID-User-Notice
attributeId: 1.2.840.113556.1.4.1673
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 04c4da7a-e114-4e69-88de-e293f2d3b395
systemOnly: FALSE
searchFlags: 0
rangeUpper: 32768
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.599 Attribute msPKI-OIDLocalizedName

For the CA for the Active Directory domain, this attribute specifies the list of display names used to describe an OID by locale.

```
cn: ms-PKI-OID-LocalizedName
ldapDisplayName: msPKI-OIDLocalizedName
attributeId: 1.2.840.113556.1.4.1712
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7d59a816-bb05-4a72-971f-5c1331f67559
systemOnly: FALSE
searchFlags: 0
rangeUpper: 512
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.600 Attribute msPKI-Private-Key-Flag

For the CA for the Active Directory domain, this attribute specifies the private key-related flags.

```
cn: ms-PKI-Private-Key-Flag
ldapDisplayName: msPKI-Private-Key-Flag
attributeId: 1.2.840.113556.1.4.1431
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bab04ac2-0435-4709-9307-28380e7c7001
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.601 Attribute msPKI-RA-Application-Policies

For the CA for the Active Directory domain, this attribute specifies the required registration authority (RA) application policy OID in the counter signatures of the certificate request.

```
cn: ms-PKI-RA-Application-Policies
ldapDisplayName: msPKI-RA-Application-Policies
attributeId: 1.2.840.113556.1.4.1675
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 3c91fbbf-4773-4ccd-a87b-85d53e7bcf6a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.602 Attribute msPKI-RA-Policies

For the CA for the Active Directory domain, this attribute specifies the required RA application policy OID in the counter signatures of the certificate request.

```
cn: ms-PKI-RA-Policies
ldapDisplayName: msPKI-RA-Policies
attributeId: 1.2.840.113556.1.4.1438
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d546ae22-0951-4d47-817e-1c9f96faad46
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.603 Attribute msPKI-RA-Signature

For the CA for the Active Directory domain, this attribute specifies the number of enrollment RA signatures required in an enrollment request.

```
cn: ms-PKI-RA-Signature
ldapDisplayName: msPKI-RA-Signature
attributeId: 1.2.840.113556.1.4.1429
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fe17e04b-937d-4f7e-8e0e-9292c8d5683e
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.604 Attribute msPKI-Site-Name

For the CA for the Active Directory domain, this attribute specifies the Active Directory site to which the CA machine belongs.

```
cn: ms-PKI-Site-Name
ldapDisplayName: msPKI-Site-Name
attributeId: 1.2.840.113556.1.4.2077
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 0cd8711f-0afc-4926-a4b1-09b08d3d436c
systemOnly: FALSE
rangeUpper: 1024
isMemberOfPartialAttributeSet: TRUE
```


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```
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.605 Attribute msPKI-Supersede-Templates

For the CA for the Active Directory domain, this attribute specifies the names of the certificate templates that are superseded by the current template.

```
cn: ms-PKI-Supersede-Templates
ldapDisplayName: msPKI-Supersede-Templates
attributeId: 1.2.840.113556.1.4.1437
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9de8ae7d-7a5b-421d-b5e4-061f79dfd5d7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.606 Attribute msPKI-Template-Minor-Revision

For the CA for the Active Directory domain, this attribute specifies the attributes in the template that are changing.

```
cn: ms-PKI-Template-Minor-Revision
ldapDisplayName: msPKI-Template-Minor-Revision
attributeId: 1.2.840.113556.1.4.1435
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 13f5236c-1884-46b1-b5d0-484e38990d58
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.607 Attribute msPKI-Template-Schema-Version

For the CA for the Active Directory domain, this attribute specifies the schema updates of the Certificate Template class object.

```
cn: ms-PKI-Template-Schema-Version
ldapDisplayName: msPKI-Template-Schema-Version
attributeId: 1.2.840.113556.1.4.1434
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
```


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```
schemaIdGuid: 0c15e9f5-491d-4594-918f-32813a091da9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.608 Attribute msPKIAccountCredentials

This attribute specifies the storage of encrypted user credential token BLOBS for roaming.

```
cn: ms-PKI-AccountCredentials
ldapDisplayName: msPKIAccountCredentials
attributeId: 1.2.840.113556.1.4.1894
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
schemaIdGuid: b8dfa744-31dc-4ef1-ac7c-84baf7ef9da7
systemOnly: FALSE
searchFlags: fCONFIDENTIAL | fRODCFilteredAttribute
attributeSecurityGuid: 91e647de-d96f-4b70-9557-d63ff4f3ccd8
linkID: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.609 Attribute msPKIDPAPIMasterKeys

This attribute specifies the storage of encrypted Data Protection API (DPAPI) master keys for the user.

```
cn: ms-PKI-DPAPIMasterKeys
ldapDisplayName: msPKIDPAPIMasterKeys
attributeId: 1.2.840.113556.1.4.1893
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
schemaIdGuid: b3f93023-9239-4f7c-b99c-6745d87adbc2
systemOnly: FALSE
searchFlags: fCONFIDENTIAL | fRODCFilteredAttribute
attributeSecurityGuid: 91e647de-d96f-4b70-9557-d63ff4f3ccd8
linkID: 2046
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.610 Attribute msPKIRoamingTimeStamp

This attribute specifies the time stamp for last change to roaming tokens.

```
cn: ms-PKI-RoamingTimeStamp
```


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```
ldapDisplayName: msPKIRoamingTimeStamp
attributeId: 1.2.840.113556.1.4.1892
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 6617e4ac-a2f1-43ab-b60c-11fbd1facf05
systemOnly: FALSE
searchFlags: fCONFIDENTIAL | fRODCFilteredAttribute
attributeSecurityGuid: 91e647de-d96f-4b70-9557-d63ff4f3ccd8
systemFlags: FLAG_SCHEMA_BASE_OBJECT
isMemberOfPartialAttributeSet: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.611 Attribute msRADIUSCallbackNumber

This attribute specifies values used by the Microsoft Network Access Protection (NAP) service.

```
cn: msRADIUSCallbackNumber
ldapDisplayName: msRADIUSCallbackNumber
attributeId: 1.2.840.113556.1.4.1145
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: db0c909c-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.612 Attribute msRADIUS-FramedInterfaceId

This attribute indicates the IPv6 interface identifier to be configured for the user.

```
cn: ms-RADIUS-FramedInterfaceId
ldapDisplayName: msRADIUS-FramedInterfaceId
attributeId: 1.2.840.113556.1.4.1913
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: a6f24a23-d65c-4d65-a64f-35fb6873c2b9
systemOnly: FALSE
searchFlags: fCOPY
rangeUpper: 8
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.613 Attribute msRADIUSFramedIPAddress

This attribute specifies values used by the NAP service.

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```
cn: msRADIUSFramedIPAddress
ldapDisplayName: msRADIUSFramedIPAddress
attributeId: 1.2.840.113556.1.4.1153
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: db0c90a4-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.614 Attribute msRADIUS-FramedIpv6Prefix

This attribute indicates an IPv6 prefix (and corresponding route) to be configured for the user.

```
cn: ms-RADIUS-FramedIpv6Prefix
ldapDisplayName: msRADIUS-FramedIpv6Prefix
attributeId: 1.2.840.113556.1.4.1915
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: f63ed610-d67c-494d-87be-cd1e24359a38
systemOnly: FALSE
searchFlags: fCOPY
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.615 Attribute msRADIUS-FramedIpv6Route

This attribute provides routing information to be configured for the user on the network attached storage (NAS).

```
cn: ms-RADIUS-FramedIpv6Route
ldapDisplayName: msRADIUS-FramedIpv6Route
attributeId: 1.2.840.113556.1.4.1917
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 5a5aa804-3083-4863-94e5-018a79a22ec0
systemOnly: FALSE
searchFlags: fCOPY
rangeUpper: 4096
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.616 Attribute msRADIUSFramedRoute

This attribute specifies values used by the NAP service.

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```
cn: msRADIUSFramedRoute
ldapDisplayName: msRADIUSFramedRoute
attributeId: 1.2.840.113556.1.4.1158
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: db0c90a9-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.617 Attribute msRADIUS-SavedFramedInterfaceId

This attribute indicates the IPv6 interface identifier to be configured for the user.

```
cn: ms-RADIUS-SavedFramedInterfaceId
ldapDisplayName: msRADIUS-SavedFramedInterfaceId
attributeId: 1.2.840.113556.1.4.1914
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: a4da7289-92a3-42e5-b6b6-dad16d280ac9
systemOnly: FALSE
searchFlags: fCOPY
rangeUpper: 8
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.618 Attribute msRADIUS-SavedFramedIpv6Prefix

This attribute indicates an IPv6 prefix (and corresponding route) to be configured for the user.

```
cn: ms-RADIUS-SavedFramedIpv6Prefix
ldapDisplayName: msRADIUS-SavedFramedIpv6Prefix
attributeId: 1.2.840.113556.1.4.1916
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 0965a062-b1e1-403b-b48d-5c0eb0e952cc
systemOnly: FALSE
searchFlags: fCOPY
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.619 Attribute msRADIUS-SavedFramedIpv6Route

This attribute provides routing information to be configured for the user on the NAS.

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```
cn: ms-RADIUS-SavedFramedIpv6Route
ldapDisplayName: msRADIUS-SavedFramedIpv6Route
attributeId: 1.2.840.113556.1.4.1918
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 9666bb5c-df9d-4d41-b437-2eec7e27c9b3
systemOnly: FALSE
searchFlags: fCOPY
rangeUpper: 4096
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.620 Attribute msRADIUSServiceType

This attribute specifies values used by the Microsoft NAP service.

```
cn: msRADIUSServiceType
ldapDisplayName: msRADIUSServiceType
attributeId: 1.2.840.113556.1.4.1171
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: db0c90b6-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.621 Attribute msRASSavedCallbackNumber

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: msRASSavedCallbackNumber
ldapDisplayName: msRASSavedCallbackNumber
attributeId: 1.2.840.113556.1.4.1189
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: db0c90c5-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.622 Attribute msRASSavedFramedIPAddress

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: msRASSavedFramedIPAddress
ldapDisplayName: msRASSavedFramedIPAddress
attributeId: 1.2.840.113556.1.4.1190
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: db0c90c6-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.623 Attribute msRASSavedFramedRoute

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: msRASSavedFramedRoute
ldapDisplayName: msRASSavedFramedRoute
attributeId: 1.2.840.113556.1.4.1191
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: db0c90c7-c1f2-11d1-bbc5-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.624 Attribute msRRASAttribute

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-RRAS-Attribute
ldapDisplayName: msRRASAttribute
attributeId: 1.2.840.113556.1.4.884
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f39b98ad-938d-11d1-aebd-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.625 Attribute msRRASVendorAttributeEntry

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ms-RRAS-Vendor-Attribute-Entry
ldapDisplayName: msRRASVendorAttributeEntry
attributeId: 1.2.840.113556.1.4.883
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f39b98ac-938d-11d1-aebd-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.626 Attribute msSFU30Aliases

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Aliases
ldapDisplayName: msSFU30Aliases
attributeId: 1.2.840.113556.1.6.18.1.323
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 20ebf171-c69a-4c31-b29d-dcb837d8912d
systemOnly: FALSE
searchFlags: 0
rangeUpper: 153600
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.627 Attribute msSFU30CryptMethod

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Crypt-Method
ldapDisplayName: msSFU30CryptMethod
attributeId: 1.2.840.113556.1.6.18.1.352
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 4503d2a3-3d70-41b8-b077-dff123c15865
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.628 Attribute msSFU30Domains

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Domains
ldapDisplayName: msSFU30Domains
attributeId: 1.2.840.113556.1.6.18.1.340
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 93095ed3-6f30-4bdd-b734-65d569f5f7c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 256000
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.629 Attribute msSFU30FieldSeparator

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Field-Separator
ldapDisplayName: msSFU30FieldSeparator
attributeId: 1.2.840.113556.1.6.18.1.302
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a2e11a42-e781-4ca1-a7fa-ec307f62b6a1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 50
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.630 Attribute msSFU30IntraFieldSeparator

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Intra-Field-Separator
ldapDisplayName: msSFU30IntraFieldSeparator
attributeId: 1.2.840.113556.1.6.18.1.303
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 95b2aef0-27e4-4cb9-880a-a2d9a9ea23b8
systemOnly: FALSE
searchFlags: 0
rangeUpper: 50
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.631 Attribute msSFU30IsValidContainer

This attribute is used by Windows Services for UNIX.

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```
cn: msSFU-30-Is-Valid-Container
ldapDisplayName: msSFU30IsValidContainer
attributeId: 1.2.840.113556.1.6.18.1.350
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 0dea42f5-278d-4157-b4a7-49b59664915b
systemOnly: FALSE
searchFlags: fATTINDEX
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.632 Attribute msSFU30KeyAttributes

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Key-Attributes
ldapDisplayName: msSFU30KeyAttributes
attributeId: 1.2.840.113556.1.6.18.1.301
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 32ecd698-ce9e-4894-a134-7ad76b082e83
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.633 Attribute msSFU30KeyValues

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Key-Values
ldapDisplayName: msSFU30KeyValues
attributeId: 1.2.840.113556.1.6.18.1.324
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 37830235-e5e9-46f2-922b-d8d44f03e7ae
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10240
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.634 Attribute msSFU30MapFilter

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Map-Filter
ldapDisplayName: msSFU30MapFilter
attributeId: 1.2.840.113556.1.6.18.1.306
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: TRUE
schemaIdGuid: b7b16e01-024f-4e23-ad0d-71f1a406b684
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.635 Attribute msSFU30MasterServerName

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Master-Server-Name
ldapDisplayName: msSFU30MasterServerName
attributeId: 1.2.840.113556.1.6.18.1.307
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4cc908a2-9e18-410e-8459-f17cc422020a
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.636 Attribute msSFU30MaxGidNumber

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Max-Gid-Number
ldapDisplayName: msSFU30MaxGidNumber
attributeId: 1.2.840.113556.1.6.18.1.342
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 04ee6aa6-f83b-469a-bf5a-3c00d3634669
systemOnly: FALSE
searchFlags: fATTINDEX
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.637 Attribute msSFU30MaxUidNumber

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Max-Uid-Number
ldapDisplayName: msSFU30MaxUidNumber
attributeId: 1.2.840.113556.1.6.18.1.343
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ec998437-d944-4a28-8500-217588adfc75
systemOnly: FALSE
searchFlags: fATTINDEX
```


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Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.638 Attribute msSFU30Name

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Name
ldapDisplayName: msSFU30Name
attributeId: 1.2.840.113556.1.6.18.1.309
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 16c5d1d3-35c2-4061-a870-a5cefda804f0
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.639 Attribute msSFU30NetgroupHostAtDomain

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Netgroup-Host-At-Domain
ldapDisplayName: msSFU30NetgroupHostAtDomain
attributeId: 1.2.840.113556.1.6.18.1.348
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 97d2bf65-0466-4852-a25a-ec20f57ee36c
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 2048
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.640 Attribute msSFU30NetgroupUserAtDomain

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Netgroup-User-At-Domain
ldapDisplayName: msSFU30NetgroupUserAtDomain
attributeId: 1.2.840.113556.1.6.18.1.349
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: a9e84eed-e630-4b67-b4b3-cad2a82d345e
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 2048
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.641 Attribute msSFU30NisDomain

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Nis-Domain
ldapDisplayName: msSFU30NisDomain
attributeId: 1.2.840.113556.1.6.18.1.339
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 9ee3b2e3-c7f3-45f8-8c9f-1382be4984d2
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE | fATTINDEX
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.642 Attribute msSFU30NSMAPFieldPosition

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-NSMAP-Field-Position
ldapDisplayName: msSFU30NSMAPFieldPosition
attributeId: 1.2.840.113556.1.6.18.1.345
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 585c9d5e-f599-4f07-9cf9-4373af4b89d3
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.643 Attribute msSFU30OrderNumber

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Order-Number
ldapDisplayName: msSFU30OrderNumber
attributeId: 1.2.840.113556.1.6.18.1.308
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 02625f05-d1ee-4f9f-b366-55266becb95c
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.644 Attribute msSFU30PosixMember

This attribute is used by Windows Services for UNIX.

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```
cn: msSFU-30-Posix-Member
ldapDisplayName: msSFU30PosixMember
attributeId: 1.2.840.113556.1.6.18.1.346
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: c875d82d-2848-4cec-bb50-3c5486d09d57
systemOnly: FALSE
searchFlags: 0
linkID: 2030
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.645 Attribute msSFU30PosixMemberOf

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Posix-Member-Of
ldapDisplayName: msSFU30PosixMemberOf
attributeId: 1.2.840.113556.1.6.18.1.347
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 7bd76b92-3244-438a-ada6-24f5ea34381e
systemOnly: FALSE
searchFlags: 0
linkID: 2031
systemFlags: FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.646 Attribute msSFU30ResultAttributes

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Result-Attributes
ldapDisplayName: msSFU30ResultAttributes
attributeId: 1.2.840.113556.1.6.18.1.305
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: e167b0b6-4045-4433-ac35-53f972d45cba
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.647 Attribute msSFU30SearchAttributes

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Search-Attributes
```


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```
ldapDisplayName: msSFU30SearchAttributes
attributeId: 1.2.840.113556.1.6.18.1.304
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: ef9a2df0-2e57-48c8-8950-0cc674004733
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.648 Attribute msSFU30SearchContainer

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Search-Container
ldapDisplayName: msSFU30SearchContainer
attributeId: 1.2.840.113556.1.6.18.1.300
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 27eebfa2-fbeb-4f8e-aad6-c50247994291
systemOnly: FALSE
searchFlags: 0
rangeUpper: 2048
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.649 Attribute msSFU30YpServers

This attribute is used by Windows Services for UNIX.

```
cn: msSFU-30-Yp-Servers
ldapDisplayName: msSFU30YpServers
attributeId: 1.2.840.113556.1.6.18.1.341
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 084a944b-e150-4bfe-9345-40e1aedaebba
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 20480
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.650 Attribute msSPP-ConfigLicense

This attribute contains the product-key configuration license used during online/phone activation of the Active Directory forest.

```
cn: ms-SPP-Config-License
ldapDisplayName: msSPP-ConfigLicense
attributeId: 1.2.840.113556.1.4.2087
attributeSyntax: 2.5.5.10
```


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```
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 5242880
schemaIdGuid: 0353c4b5-d199-40b0-b3c5-deb32fd9ec06
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.651 Attribute msSPP-ConfirmationId

This attribute contains the confirmation ID (CID) used for phone activation of the Active Directory forest.

```
cn: ms-SPP-Confirmation-Id
ldapDisplayName: msSPP-ConfirmationId
attributeId: 1.2.840.113556.1.4.2084
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 512
schemaIdGuid: 6e8797c4-acda-4a49-8740-b0bd05a9b831
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.652 Attribute msSPP-CSVLKPartialProductKey

This attribute contains the last five characters of the CSVLK product key used to create the activation object.

```
cn: ms-SPP-CSVLK-Partial-Product-Key
ldapDisplayName: msSPP-CSVLKPartialProductKey
attributeId: 1.2.840.113556.1.4.2106
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeLower: 5
rangeUpper: 5
schemaIdGuid: a601b091-8652-453a-b386-87ad239b7c08
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.653 Attribute msSPP-CSVLKPid

This attribute contains the ID of the CSVLK product key used to create the activation object.

```
cn: ms-SPP-CSVLK-Pid
ldapDisplayName: msSPP-CSVLKPid
```


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```
attributeId: 1.2.840.113556.1.4.2105
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 512
schemaIdGuid: b47f510d-6b50-47e1-b556-772c79e4ffc4
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.654 Attribute msSPP-CSVLKSkuId

This attribute contains the SKU ID of the CSVLK product key used to create the activation object.

```
cn: ms-SPP-CSVLK-Sku-Id
ldapDisplayName: msSPP-CSVLKSkuId
attributeId: 1.2.840.113556.1.4.2081
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
schemaIdGuid: 9684f739-7b78-476d-8d74-31ad7692eef4
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.655 Attribute msSPP-InstallationId

This attribute contains the installation ID (IID) used for phone activation of the Active Directory forest.

```
cn: ms-SPP-Installation-Id
ldapDisplayName: msSPP-InstallationId
attributeId: 1.2.840.113556.1.4.2083
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 512
schemaIdGuid: 69bfb114-407b-4739-a213-c663802b3e37
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.656 Attribute msSPP-IssuanceLicense

This attribute contains the issuance license used during online/phone activation of the Active Directory forest.

```
cn: ms-SPP-Issuance-License
```


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```
ldapDisplayName: msSPP-IssuanceLicense
attributeId: 1.2.840.113556.1.4.2088
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 5242880
schemaIdGuid: 1075b3a1-bbaf-49d2-ae8d-c4f25c823303
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.657 Attribute msSPP-KMSIds

This attribute holds the KMS IDs enabled by the activation object.

```
cn: ms-SPP-KMS-Ids
ldapDisplayName: msSPP-KMSIds
attributeId: 1.2.840.113556.1.4.2082
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
schemaIdGuid: 9b663eda-3542-46d6-9df0-314025af2bac
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.658 Attribute msSPP-OnlineLicense

This attribute contains the license that is used during online activation of the Active Directory forest.

```
cn: ms-SPP-Online-License
ldapDisplayName: msSPP-OnlineLicense
attributeId: 1.2.840.113556.1.4.2085
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 5242880
schemaIdGuid: 098f368e-4812-48cd-afb7-a136b96807ed
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.659 Attribute msSPP-PhoneLicense

This attribute contains the license that is used during phone activation of the Active Directory forest.

```
cn: ms-SPP-Phone-License
```


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```
ldapDisplayName: msSPP-PhoneLicense
attributeId: 1.2.840.113556.1.4.2086
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: 0
rangeUpper: 5242880
schemaIdGuid: 67e4d912-f362-4052-8c79-42f45ba7b221
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.660 Attribute msTAPI-ConferenceBlob

This attribute is used by the Telephonic Application Programming Interface (TAPI). For more information, see [RFC2327].

```
cn: ms-TAPI-Conference-Blob
ldapDisplayName: msTAPI-ConferenceBlob
attributeId: 1.2.840.113556.1.4.1700
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 4cc4601e-7201-4141-abc8-3e529ae88863
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.661 Attribute msTAPI-IpAddress

This attribute is used by TAPI. For more information, see [RFC2327].

```
cn: ms-TAPI-Ip-Address
ldapDisplayName: msTAPI-IpAddress
attributeId: 1.2.840.113556.1.4.1701
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: efd7d7f7-178e-4767-87fa-f8a16b840544
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.662 Attribute msTAPI-ProtocolId

This attribute is used by TAPI. For more information, see [RFC2327].

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```
cn: ms-TAPI-Protocol-Id
ldapDisplayName: msTAPI-ProtocolId
attributeId: 1.2.840.113556.1.4.1699
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 89c1ebcf-7a5f-41fd-99ca-c900b32299ab
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.663 Attribute msTAPI-uid

This attribute is used by TAPI. For more information, see [RFC2327].

```
cn: ms-TAPI-Unique-Identifier
ldapDisplayName: msTAPI-uid
attributeId: 1.2.840.113556.1.4.1698
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 70a4e7ea-b3b9-4643-8918-e6dd2471bfd4
systemOnly: FALSE
searchFlags: 0
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.664 Attribute msTPM-OwnerInformation

This attribute contains the owner information of a particular trusted platform module (TPM).

```
cn: ms-TPM-OwnerInformation
ldapDisplayName: msTPM-OwnerInformation
attributeId: 1.2.840.113556.1.4.1966
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: aa4e1a6d-550d-4e05-8c35-4afcb917a9fe
searchFlags: fPRESERVEONDELETE | fCOPY | fCONFIDENTIAL |
 fRODCFilteredAttribute
rangeUpper: 128
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.665 Attribute msTPM-OwnerInformationTemp

This attribute contains temporary owner information for a particular TPM.

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```
cn: ms-TPM-Owner-Information-Temp
ldapDisplayName: msTPM-OwnerInformationTemp
attributeId: 1.2.840.113556.1.4.2108
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fRODCFilteredAttribute | fCONFIDENTIAL
rangeUpper: 128
schemaIdGuid: c894809d-b513-4ff8-8811-f4f43f5ac7bc
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.666 Attribute msTPM-SrkPubThumbprint

This attribute contains the thumbprint of the SrkPub corresponding to a particular TPM. This thumbprint helps to index the TPM devices in the directory.

```
cn: ms-TPM-Srk-Pub-Thumbprint
ldapDisplayName: msTPM-SrkPubThumbprint
attributeId: 1.2.840.113556.1.4.2107
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE | fPDNTATTINDEX | fATTINDEX
rangeUpper: 20
schemaIdGuid: 19d706eb-4d76-44a2-85d6-1c342be3be37
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.667 Attribute msTPM-TpmInformationForComputer

This attribute links a computer object to a TPM object.

```
cn: ms-TPM-Tpm-Information-For-Computer
ldapDisplayName: msTPM-TpmInformationForComputer
attributeId: 1.2.840.113556.1.4.2109
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: TRUE
systemOnly: FALSE
searchFlags: fCOPY
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: ea1b7b93-5e48-46d5-bc6c-4df4fda78a35
linkID: 2182
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.668 Attribute msTPM-TpmInformationForComputerBL

This attribute links a TPM object to the computer objects associated with it.

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```
cn: ms-TPM-Tpm-Information-For-Computer-BL
ldapDisplayName: msTPM-TpmInformationForComputerBL
attributeId: 1.2.840.113556.1.4.2110
attributeSyntax: 2.5.5.1
omSyntax: 127
isSingleValued: FALSE
systemOnly: TRUE
searchFlags: 0
omObjectClass: 1.3.12.2.1011.28.0.714
schemaIdGuid: 14fa84c9-8ecd-4348-bc91-6d3ced472ab7
linkID: 2183
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.669 Attribute msTSAllowLogon

This attribute specifies whether the user is allowed to log on to the terminal server. The value is 1 if logon is allowed or 0 if logon is not allowed.

```
cn: ms-TS-Allow-Logon
ldapDisplayName: msTSAllowLogon
attributeId: 1.2.840.113556.1.4.1979
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 3a0cd464-bc54-40e7-93ae-a646a6ecc4b4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.670 Attribute msTSBrokenConnectionAction

This attribute specifies the action to take when a Terminal Services session limit is reached. The value is 1 if the client session is to be terminated or 0 if the client session is to be disconnected.

```
cn: ms-TS-Broken-Connection-Action
ldapDisplayName: msTSBrokenConnectionAction
attributeId: 1.2.840.113556.1.4.1985
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 1cf41bba-5604-463e-94d6-1a1287b72ca3
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.671 Attribute msTSConnectClientDrives

This attribute specifies whether to reconnect to mapped client drives at logon. The value is 1 if reconnection is enabled or 0 if reconnection is disabled.

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```
cn: ms-TS-Connect-Client-Drives
ldapDisplayName: msTSConnectClientDrives
attributeId: 1.2.840.113556.1.4.1986
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 23572aaf-29dd-44ea-b0fa-7e8438b9a4a3
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.672 Attribute msTSConnectPrinterDrives

This attribute specifies whether to reconnect to mapped client printers at logon. The value is 1 if reconnection is enabled or 0 if reconnection is disabled.

```
cn: ms-TS-Connect-Printer-Drives
ldapDisplayName: msTSConnectPrinterDrives
attributeId: 1.2.840.113556.1.4.1987
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 8ce6a937-871b-4c92-b285-d99d4036681c
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.673 Attribute msTSDefaultToMainPrinter

This attribute specifies whether to print automatically to the client's default printer. The value is 1 if printing to the client's default printer is enabled or 0 if it is disabled.

```
cn: ms-TS-Default-To-Main-Printer
ldapDisplayName: msTSDefaultToMainPrinter
attributeId: 1.2.840.113556.1.4.1988
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: c0ffe2bd-cacf-4dc7-88d5-61e9e95766f6
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.674 Attribute msTSEndpointData

This attribute represents the virtual machine name for a machine.

```
cn: ms-TS-Endpoint-Data
ldapDisplayName: msTSEndpointData
```


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```
attributeId: 1.2.840.113556.1.4.2070
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 40e1c407-4344-40f3-ab43-3625a34a63a2
systemOnly: FALSE
rangeLower: 0
rangeUpper: 32767
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.675 Attribute msTSEndpointPlugin

This attribute represents the name of the plugin for the terminal server connection.

```
cn: ms-TS-Endpoint-Plugin
ldapDisplayName: msTSEndpointPlugin
attributeId: 1.2.840.113556.1.4.2072
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3c08b569-801f-4158-b17b-e363d6ae696a
systemOnly: FALSE
rangeLower: 0
rangeUpper: 32767
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.676 Attribute msTSEndpointType

This attribute defines whether the machine is a physical machine or a virtual machine.

```
cn: ms-TS-Endpoint-Type
ldapDisplayName: msTSEndpointType
attributeId: 1.2.840.113556.1.4.2071
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 377ade80-e2d8-46c5-9bcd-6d9dec93b35e
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.677 Attribute msTSExpireDate

This attribute specifies the expiration date of the Terminal Services session per user Client Address License (CAL).

```
cn: MS-TS-ExpireDate
```


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```
ldapDisplayName: msTSExpireDate
attributeId: 1.2.840.113556.1.4.1993
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 70004ef5-25c3-446a-97c8-996ae8566776
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.678 Attribute msTSExpireDate2

This attribute specifies the expiration date of the second Terminal Services session per user CAL.

```
cn: MS-TS-ExpireDate2
ldapDisplayName: msTSExpireDate2
attributeId: 1.2.840.113556.1.4.2000
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 54dfcf71-bc3f-4f0b-9d5a-4b2476bb8925
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.679 Attribute msTSExpireDate3

This attribute specifies the expiration date of the third Terminal Services session per user CAL.

```
cn: MS-TS-ExpireDate3
ldapDisplayName: msTSExpireDate3
attributeId: 1.2.840.113556.1.4.2003
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 41bc7f04-be72-4930-bd10-1f3439412387
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.680 Attribute msTSExpireDate4

This attribute specifies the expiration date of the fourth Terminal Services session per user CAL.

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```
cn: MS-TS-ExpireDate4
ldapDisplayName: msTSExpireDate4
attributeId: 1.2.840.113556.1.4.2006
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 5e11dc43-204a-4faf-a008-6863621c6f5f
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG SCHEMA BASE OBJECT
showInAdvancedViewOnly: TRUE
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.681 Attribute msTSHomeDirectory

This attribute specifies the home directory for the user. Each user on a terminal server has a unique home directory. This ensures that application information is stored separately for each user in a multiuser environment. To set a home directory on the local computer, the implementer specifies a local path; for example, C:\Path. To set a home directory in a network environment, the implementer first sets the TerminalServicesHomeDrive property, and then sets this property to a Universal Naming Convention (UNC) path.

```
cn: ms-TS-Home-Directory
ldapDisplayName: msTSHomeDirectory
attributeId: 1.2.840.113556.1.4.1977
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5d3510f0-c4e7-4122-b91f-a20add90e246
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.682 Attribute msTSHomeDrive

This attribute specifies a home drive for the user. In a network environment, this property is a string containing a drive specification (a drive letter followed by a colon) to which the UNC path specified in the TerminalServicesHomeDirectory property is mapped. To set a home directory in a network environment, the implementer first sets this property, and then sets the TerminalServicesHomeDirectory property.

```
cn: ms-TS-Home-Drive
ldapDisplayName: msTSHomeDrive
attributeId: 1.2.840.113556.1.4.1978
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5f0a24d9-dffa-4cd9-acbf-a0680c03731e
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.683 Attribute msTSInitialProgram

This attribute specifies the path and file name of the application that the user wants to start automatically when the user logs on to the terminal server. To set an initial application to start when the user logs on, the implementer first sets this property, and then sets the TerminalServicesWorkDirectory property. If the implementer sets only the TerminalServicesInitialProgram property, the application starts in the user's session in the default user directory.

```
cn: ms-TS-Initial-Program
ldapDisplayName: msTSInitialProgram
attributeId: 1.2.840.113556.1.4.1990
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 9201ac6f-1d69-4dfb-802e-d95510109599
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.684 Attribute msTSLicenseVersion

This attribute specifies the version of the Terminal Services session per user CAL.

```
cn: MS-TS-LicenseVersion
ldapDisplayName: msTSLicenseVersion
attributeId: 1.2.840.113556.1.4.1994
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 0ae94a89-372f-4df2-ae8a-c64a2bc47278
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.685 Attribute msTSLicenseVersion2

This attribute specifies the version of the second Terminal Services session per user CAL.

```
cn: MS-TS-LicenseVersion2
ldapDisplayName: msTSLicenseVersion2
attributeId: 1.2.840.113556.1.4.2001
attributeSyntax: 2.5.5.12
```


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```
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4b0df103-8d97-45d9-ad69-85c3080ba4e7
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 255
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.686 Attribute msTSLicenseVersion3

This attribute specifies the version of the third Terminal Services session per user CAL.

```
cn: MS-TS-LicenseVersion3
ldapDisplayName: msTSLicenseVersion3
attributeId: 1.2.840.113556.1.4.2004
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f8ba8f81-4cab-4973-a3c8-3a6da62a5e31
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 255
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.687 Attribute msTSLicenseVersion4

This attribute specifies the version of the fourth Terminal Services session per user CAL.

```
cn: MS-TS-LicenseVersion4
ldapDisplayName: msTSLicenseVersion4
attributeId: 1.2.840.113556.1.4.2007
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 70ca5d97-2304-490a-8a27-52678c8d2095
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 255
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.688 Attribute msTSLSProperty01

This attribute is a placeholder for Terminal Server License Server Property 01.

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```
cn: MS-TSLS-Property01
ldapDisplayName: msTSLSProperty01
attributeId: 1.2.840.113556.1.4.2009
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 32767
schemaIdGuid: 87e53590-971d-4a52-955b-4794d15a84ae
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.689 Attribute msTSLSProperty02

This attribute is a placeholder for Terminal Server License Server Property 02.

```
cn: MS-TSLS-Property02
ldapDisplayName: msTSLSProperty02
attributeId: 1.2.840.113556.1.4.2010
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 32767
schemaIdGuid: 47c77bb0-316e-4e2f-97f1-0d4c48fca9dd
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.690 Attribute msTSManagingLS

This attribute specifies the issuer name of the Terminal Services session per user CAL.

```
cn: MS-TS-ManagingLS
ldapDisplayName: msTSManagingLS
attributeId: 1.2.840.113556.1.4.1995
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f3bcc547-85b0-432c-9ac0-304506bf2c83
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.691 Attribute msTSManagingLS2

This attribute specifies the issuer name of the second Terminal Services session per user CAL.

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```
cn: MS-TS-ManagingLS2
ldapDisplayName: msTSManagingLS2
attributeId: 1.2.840.113556.1.4.2002
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
rangeLower: 0
rangeUpper: 255
schemaIdGuid: 349f0757-51bd-4fc8-9d66-3eceea8a25be
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.692 Attribute msTSManagingLS3

This attribute specifies the issuer name of the third Terminal Services session per user CAL.

```
cn: MS-TS-ManagingLS3
ldapDisplayName: msTSManagingLS3
attributeId: 1.2.840.113556.1.4.2005
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
rangeLower: 0
rangeUpper: 255
schemaIdGuid: fad5dcc1-2130-4c87-a118-75322cd67050
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.693 Attribute msTSManagingLS4

This attribute specifies the issuer name of the fourth Terminal Services session per user CAL.

```
cn: MS-TS-ManagingLS4
ldapDisplayName: msTSManagingLS4
attributeId: 1.2.840.113556.1.4.2008
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
systemOnly: FALSE
rangeLower: 0
rangeUpper: 255
schemaIdGuid: f7a3b6a0-2107-4140-b306-75cb521731e5
searchFlags: fATTINDEX
attributeSecurityGuid: 5805bc62-bdc9-4428-a5e2-856a0f4c185e
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.694 Attribute msTSMaxConnectionTime

This attribute specifies the maximum duration (in minutes) of the Terminal Services session. After the specified number of minutes have elapsed, the session can be disconnected or terminated.

```
cn: ms-TS-Max-Connection-Time
ldapDisplayName: msTSMaxConnectionTime
attributeId: 1.2.840.113556.1.4.1982
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1d960ee2-6464-4e95-a781-e3b5cd5f9588
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.695 Attribute msTSMaxDisconnectionTime

This attribute specifies the maximum amount of time (in minutes) that a disconnected Terminal Services session remains active on the terminal server. After the specified number of minutes have elapsed, the session is terminated.

```
cn: ms-TS-Max-Disconnection-Time
ldapDisplayName: msTSMaxDisconnectionTime
attributeId: 1.2.840.113556.1.4.1981
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 326f7089-53d8-4784-b814-46d8535110d2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.696 Attribute msTSMaxIdleTime

This attribute specifies the maximum amount of time (in minutes) that the Terminal Services session can remain idle. After the specified number of minutes have elapsed, the session can be disconnected or terminated.

```
cn: ms-TS-Max-Idle-Time
ldapDisplayName: msTSMaxIdleTime
attributeId: 1.2.840.113556.1.4.1983
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ff739e9c-6bb7-460e-b221-e250f3de0f95
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.697 Attribute msTSPrimaryDesktop

This attribute links to the computer object of the primary desktop assigned to a user. If this attribute is empty, the user has no assigned desktop.

```
cn: ms-TS-Primary-Desktop
ldapDisplayName: msTSPrimaryDesktop
attributeId: 1.2.840.113556.1.4.2073
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
linkID: 2170
isSingleValued: TRUE
schemaIdGuid: 29259694-09e4-4237-9f72-9306ebe63ab2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.698 Attribute msTSPrimaryDesktopBL

This attribute is the back link attribute for attribute msTSPrimaryDesktop.

```
cn: ms-TS-Primary-Desktop-BL
ldapDisplayName: msTSPrimaryDesktopBL
attributeId: 1.2.840.113556.1.4.2074
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
linkID: 2171
isSingleValued: FALSE
schemaIdGuid: 9daadc18-40d1-4ed1-a2bf-6b9bf47d3daa
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.699 Attribute msTSProfilePath

This attribute specifies a roaming or mandatory profile path to use when the user logs on to the terminal server. The profile path is in the following network path format: "\\servername\profiles folder name\username".

```
cn: ms-TS-Profile-Path
ldapDisplayName: msTSProfilePath
attributeId: 1.2.840.113556.1.4.1976
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: e65c30db-316c-4060-a3a0-387b083f09cd
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.700 Attribute msTSProperty01

This attribute is a placeholder for Terminal Server Property 01.

```
cn: MS-TS-Property01
ldapDisplayName: msTSProperty01
attributeId: 1.2.840.113556.1.4.1991
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: faaea977-9655-49d7-853d-f27bb7aaca0f
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.701 Attribute msTSProperty02

This attribute is a placeholder for Terminal Server Property 02.

```
cn: MS-TS-Property02
ldapDisplayName: msTSProperty02
attributeId: 1.2.840.113556.1.4.1992
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 3586f6ac-51b7-4978-ab42-f936463198e7
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.702 Attribute msTSReconnectionAction

This attribute specifies whether to allow reconnection to a disconnected Terminal Services session from any client computer. The value is 1 if reconnection is allowed from the original client computer only, or 0 if reconnection from any client computer is allowed.

```
cn: ms-TS-Reconnection-Action
ldapDisplayName: msTSReconnectionAction
attributeId: 1.2.840.113556.1.4.1984
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 366ed7ca-3e18-4c7f-abae-351a01e4b4f7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.703 Attribute msTSRemoteControl

This attribute specifies whether to allow remote observation or remote control of the user's Terminal Services session. The values are as follows:

- 0: Disable
- 1: EnableInputNotify
- 2: EnableInputNoNotify
- 3: EnableNoInputNotify
- 4: EnableNoInputNoNotify

For a description of these values, see the RemoteControl method of the Win32_TSRemoteControlSetting WMI class.

```
cn: ms-TS-Remote-Control
ldapDisplayName: msTSRemoteControl
attributeId: 1.2.840.113556.1.4.1980
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 15177226-8642-468b-8c48-03ddfd004982
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.704 Attribute msTSSecondaryDesktops

This attribute links to the computer objects of the secondary desktops that a user can be assigned.

```
cn: ms-TS-Secondary-Desktops
ldapDisplayName: msTSSecondaryDesktops
attributeId: 1.2.840.113556.1.4.2075
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
linkID: 2172
isSingleValued: FALSE
schemaIdGuid: f63aa29a-bb31-48e1-bfab-0a6c5a1d39c2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.705 Attribute msTSSecondaryDesktopBL

This attribute is the back link attribute for msTSSecondaryDesktops.

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```
cn: ms-TS-Secondary-Desktop-BL
ldapDisplayName: msTSSecondaryDesktopBL
attributeId: 1.2.840.113556.1.4.2078
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
linkID: 2173
isSingleValued: FALSE
schemaIdGuid: 34b107af-a00a-455a-b139-dd1a1b12d8af
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_ATTR_NOT_REPLICATED | FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.706 Attribute msTSWorkDirectory

This attribute specifies the working directory path for the user. To set an initial application to start when the user logs on to the terminal server, the implementer first sets the TerminalServicesInitialProgram property and then sets this property.

```
cn: ms-TS-Work-Directory
ldapDisplayName: msTSWorkDirectory
attributeId: 1.2.840.113556.1.4.1989
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a744f666-3d3c-4cc8-834b-9d4f6f687b8b
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.707 Attribute msWMI-Author

This attribute is used by the Windows Management Instrumentation (WMI) Remote Protocol for network communication and specifies the author of an instance of a class.

```
cn: ms-WMI-Author
ldapDisplayName: msWMI-Author
attributeId: 1.2.840.113556.1.4.1623
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 6366c0c1-6972-4e66-b3a5-1d52ad0c0547
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.708 Attribute msWMI-ChangeDate

This attribute is used by the WMI Remote Protocol for network communication and specifies the last date that an object was changed.

```
cn: ms-WMI-ChangeDate
ldapDisplayName: msWMI-ChangeDate
attributeId: 1.2.840.113556.1.4.1624
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f9cdf7a0-ec44-4937-a79b-cd91522b3aa8
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.709 Attribute msWMI-Class

This attribute is used by the WMI Remote Protocol for network communication and specifies the name of a WMI Class object in an associated encoding (for example, Win32_ComputerSystem).

```
cn: ms-WMI-Class
ldapDisplayName: msWMI-Class
attributeId: 1.2.840.113556.1.4.1676
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 90c1925f-4a24-4b07-b202-be32eb3c8b74
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.710 Attribute msWMI-ClassDefinition

This attribute is for the WMI Remote Protocol for network communication and specifies a class definition to be instated in some WMI namespace.

```
cn: ms-WMI-ClassDefinition
ldapDisplayName: msWMI-ClassDefinition
attributeId: 1.2.840.113556.1.4.1625
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2b9c0ebc-c272-45cb-99d2-4d0e691632e0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.711 Attribute msWMI-CreationDate

This attribute is used by the WMI Remote Protocol for network communication and specifies the creation time of an instance.

```
cn: ms-WMI-CreationDate
ldapDisplayName: msWMI-CreationDate
attributeId: 1.2.840.113556.1.4.1626
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 748b0a2e-3351-4b3f-b171-2f17414ea779
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.712 Attribute msWMI-Genus

This attribute is used by the WMI Remote Protocol for network communication and specifies the object type of an encoding.

```
cn: ms-WMI-Genus
ldapDisplayName: msWMI-Genus
attributeId: 1.2.840.113556.1.4.1677
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 50c8673a-8f56-4614-9308-9e1340fb9af3
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.713 Attribute msWMI-ID

This attribute is used by the WMI Remote Protocol for network communication and specifies a unique ID for an object instance.

```
cn: ms-WMI-ID
ldapDisplayName: msWMI-ID
attributeId: 1.2.840.113556.1.4.1627
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 9339a803-94b8-47f7-9123-a853b9ff7e45
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.714 Attribute msWMI-Int8Default

This attribute is used by the WMI Remote Protocol for network communication and specifies the default value for WMI 64-bit integer parameter objects.

```
cn: ms-WMI-int8Default
ldapDisplayName: msWMI-Int8Default
attributeId: 1.2.840.113556.1.4.1632
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: f4d8085a-8c5b-4785-959b-dc585566e445
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.715 Attribute msWMI-Int8Max

This attribute is used by the WMI Remote Protocol for network communication and specifies the maximum value for a WMI 64-bit integer parameter object.

```
cn: ms-WMI-int8Max
ldapDisplayName: msWMI-Int8Max
attributeId: 1.2.840.113556.1.4.1633
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: e3d8b547-003d-4946-a32b-dc7cedc96b74
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.716 Attribute msWMI-Int8Min

This attribute is used by the WMI Remote Protocol for network communication and specifies the minimum value for a WMI 64-bit integer parameter object.

```
cn: ms-WMI-int8Min
ldapDisplayName: msWMI-Int8Min
attributeId: 1.2.840.113556.1.4.1634
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
```


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```
schemaIdGuid: ed1489d1-54cc-4066-b368-a00daa2664f1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.717 Attribute msWMI-Int8ValidValues

This attribute is for the WMI Remote Protocol for network communication and specifies the valid values for a WMI 64-bit integer parameter object.

```
cn: ms-WMI-int8ValidValues
ldapDisplayName: msWMI-Int8ValidValues
attributeId: 1.2.840.113556.1.4.1635
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: FALSE
schemaIdGuid: 103519a9-c002-441b-981a-b0b3e012c803
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.718 Attribute msWMI-IntDefault

This attribute is used by the WMI Remote Protocol for network communication and specifies the default value for WMI 32-bit integer parameter objects.

```
cn: ms-WMI-intDefault
ldapDisplayName: msWMI-IntDefault
attributeId: 1.2.840.113556.1.4.1628
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1b0c07f8-76dd-4060-a1e1-70084619dc90
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.719 Attribute msWMI-intFlags1

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-intFlags1
ldapDisplayName: msWMI-intFlags1
attributeId: 1.2.840.113556.1.4.1678
attributeSyntax: 2.5.5.9
```


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```
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 18e006b9-6445-48e3-9dcf-b5ecfbc4df8e
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.720 Attribute msWMI-intFlags2

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-intFlags2
ldapDisplayName: msWMI-intFlags2
attributeId: 1.2.840.113556.1.4.1679
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 075a42c9-c55a-45b1-ac93-eb086b31f610
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.721 Attribute msWMI-intFlags3

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-intFlags3
ldapDisplayName: msWMI-intFlags3
attributeId: 1.2.840.113556.1.4.1680
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f29fa736-de09-4be4-b23a-e734c124bacc
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.722 Attribute msWMI-intFlags4

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-intFlags4
ldapDisplayName: msWMI-intFlags4
attributeId: 1.2.840.113556.1.4.1681
attributeSyntax: 2.5.5.9
```


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```
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bd74a7ac-c493-4c9c-bdfa-5c7b119ca6b2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.723 Attribute msWMI-IntMax

This attribute is used by the WMI Remote Protocol for network communication and specifies the maximum value for a WMI 32-bit integer parameter object.

```
cn: ms-WMI-intMax
ldapDisplayName: msWMI-IntMax
attributeId: 1.2.840.113556.1.4.1629
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fb920c2c-f294-4426-8ac1-d24b42aa2bce
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.724 Attribute msWMI-IntMin

This attribute is used by the WMI Remote Protocol for network communication and specifies the minimum value for a WMI 32-bit integer parameter object.

```
cn: ms-WMI-intMin
ldapDisplayName: msWMI-IntMin
attributeId: 1.2.840.113556.1.4.1630
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 68c2e3ba-9837-4c70-98e0-f0c33695d023
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.725 Attribute msWMI-IntValidValues

This attribute is for the WMI Remote Protocol for network communication and specifies the valid values for a WMI 32-bit integer parameter object.

```
cn: ms-WMI-intValidValues
```


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```
ldapDisplayName: msWMI-IntValidValues
attributeId: 1.2.840.113556.1.4.1631
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: 6af565f6-a749-4b72-9634-3c5d47e6b4e0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.726 Attribute msWMI-Mof

This attribute is used by the WMI Remote Protocol for network communication and specifies the Manage Operations Framework (MOF) definition of some WMI object.

```
cn: ms-WMI-Mof
ldapDisplayName: msWMI-Mof
attributeId: 1.2.840.113556.1.4.1638
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 6736809f-2064-443e-a145-81262b1f1366
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.727 Attribute msWMI-Name

This attribute is used by the WMI Remote Protocol for network communication and specifies the friendly name for top-level policy objects.

```
cn: ms-WMI-Name
ldapDisplayName: msWMI-Name
attributeId: 1.2.840.113556.1.4.1639
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: c6c8ace5-7e81-42af-ad72-77412c5941c4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.728 Attribute msWMI-NormalizedClass

This attribute is used by the WMI Remote Protocol for network communication and specifies the name of a core WMI policy class.

```
cn: ms-WMI-NormalizedClass
ldapDisplayName: msWMI-NormalizedClass
attributeId: 1.2.840.113556.1.4.1640
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: eaba628f-eb8e-4fe9-83fc-693be695559b
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.729 Attribute msWMI-Parm1

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-Parm1
ldapDisplayName: msWMI-Parm1
attributeId: 1.2.840.113556.1.4.1682
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 27e81485-b1b0-4a8b-bedd-ce19a837e26e
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.730 Attribute msWMI-Parm2

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-Parm2
ldapDisplayName: msWMI-Parm2
attributeId: 1.2.840.113556.1.4.1683
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 0003508e-9c42-4a76-a8f4-38bf64bab0de
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.731 Attribute msWMI-Parm3

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-Parm3
ldapDisplayName: msWMI-Parm3
attributeId: 1.2.840.113556.1.4.1684
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 45958fb6-52bd-48ce-9f9f-c2712d9f2bfc
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.732 Attribute msWMI-Parm4

This attribute is used by the WMI Remote Protocol for network communication.

```
cn: ms-WMI-Parm4
ldapDisplayName: msWMI-Parm4
attributeId: 1.2.840.113556.1.4.1685
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3800d5a3-f1ce-4b82-a59a-1528ea795f59
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.733 Attribute msWMI-PropertyName

This attribute is used by the WMI Remote Protocol for network communication and specifies the target policy object name for a parameter object.

```
cn: ms-WMI-PropertyName
ldapDisplayName: msWMI-PropertyName
attributeId: 1.2.840.113556.1.4.1641
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ab920883-e7f8-4d72-b4a0-c0449897509d
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.734 Attribute msWMI-Query

This attribute is used by the WMI Remote Protocol for network communication and specifies a single WMI Query Language (WQL) query.

```
cn: ms-WMI-Query
ldapDisplayName: msWMI-Query
attributeId: 1.2.840.113556.1.4.1642
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 65fff93e-35e3-45a3-85ae-876c6718297f
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.735 Attribute msWMI-QueryLanguage

This attribute is used by the WMI Remote Protocol for network communication and specifies a WMI Query Language (WQL).

```
cn: ms-WMI-QueryLanguage
ldapDisplayName: msWMI-QueryLanguage
attributeId: 1.2.840.113556.1.4.1643
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7d3cfa98-c17b-4254-8bd7-4de9b932a345
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.736 Attribute msWMI-ScopeGuid

This attribute is used by the WMI Remote Protocol for network communication and specifies the GUID for the scope in which the associated encoding is located.

```
cn: ms-WMI-ScopeGuid
ldapDisplayName: msWMI-ScopeGuid
attributeId: 1.2.840.113556.1.4.1686
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 87b78d51-405f-4b7f-80ed-2bd28786f48d
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.737 Attribute msWMI-SourceOrganization

This attribute is used by the WMI Remote Protocol for network communication and specifies the business organization that initially created a policy object.

```
cn: ms-WMI-SourceOrganization
ldapDisplayName: msWMI-SourceOrganization
attributeId: 1.2.840.113556.1.4.1644
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 34f7ed6c-615d-418d-aa00-549a7d7be03e
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.738 Attribute msWMI-StringDefault

This attribute is used by the WMI Remote Protocol for network communication and specifies the default string setting for a set of string parameter objects.

```
cn: ms-WMI-stringDefault
ldapDisplayName: msWMI-StringDefault
attributeId: 1.2.840.113556.1.4.1636
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 152e42b6-37c5-4f55-ab48-1606384a9aea
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.739 Attribute msWMI-StringValidValues

This attribute is used by the WMI Remote Protocol for network communication and specifies the set of strings belonging to a string set parameter object.

```
cn: ms-WMI-stringValidValues
ldapDisplayName: msWMI-StringValidValues
attributeId: 1.2.840.113556.1.4.1637
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 37609d31-a2bf-4b58-8f53-2b64e57a076d
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.740 Attribute msWMI-TargetClass

This attribute is used by the WMI Remote Protocol for network communication and specifies the class name of the policy object to be created.

```
cn: ms-WMI-TargetClass
ldapDisplayName: msWMI-TargetClass
attributeId: 1.2.840.113556.1.4.1645
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 95b6d8d6-c9e8-4661-a2bc-6a5cabc04c62
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.741 Attribute msWMI-TargetNameSpace

This attribute is used by the WMI Remote Protocol for network communication and specifies the namespace in which the object is to be created.

```
cn: ms-WMI-TargetNameSpace
ldapDisplayName: msWMI-TargetNameSpace
attributeId: 1.2.840.113556.1.4.1646
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1c4ab61f-3420-44e5-849d-8b5dbf60feb7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.742 Attribute msWMI-TargetObject

This attribute is used by the WMI Remote Protocol for network communication and specifies the one or more binary sequences representing compiled WMI objects.

```
cn: ms-WMI-TargetObject
ldapDisplayName: msWMI-TargetObject
attributeId: 1.2.840.113556.1.4.1647
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
```


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```
schemaIdGuid: c44f67a5-7de5-4a1f-92d9-662b57364b77
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.743 Attribute msWMI-TargetPath

This attribute is used by the WMI Remote Protocol for network communication and specifies the list of key/value pairs that uniquely identify a WMI object.

```
cn: ms-WMI-TargetPath
ldapDisplayName: msWMI-TargetPath
attributeId: 1.2.840.113556.1.4.1648
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5006a79a-6bfe-4561-9f52-13cf4dd3e560
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.744 Attribute msWMI-TargetType

This attribute is used by the WMI Remote Protocol for network communication and specifies the WMI reference to a type definition for a policy object.

```
cn: ms-WMI-TargetType
ldapDisplayName: msWMI-TargetType
attributeId: 1.2.840.113556.1.4.1649
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ca2a281e-262b-4ff7-b419-bc123352a4e9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.745 Attribute mustContain

This attribute is used by Active Directory to specify the list of mandatory attributes for a class.

```
cn: Must-Contain
ldapDisplayName: mustContain
attributeId: 1.2.840.113556.1.2.24
attributeSyntax: 2.5.5.2
```


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```
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf9679d3-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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3 Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- The removal of a document from the documentation set.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the technical content of the document is identical to the last released version.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.
- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated**.

Some important terms used in the change type descriptions are defined as follows:

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- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

The changes made to this document are listed in the following table. For more information, please contact dochelp@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
2.158 Attribute msDFSR-Extension	72683 : Revised description.	Y	Content update.
2.183 Attribute msDFSR-TombstoneExpiryInMin	72683 : Revised description.	Y	Content update.
2.309 Attribute msDS-ExpirePasswordsOnSmartCardOnlyAccounts	Added section with content for this version of Windows Server.	Y	New content added.
2.347 msDS-KeyCredentialLink-BL	5370 : Updated with the omObjectClass attribute.	Y	Content update.
2.394 Attribute msDS-ObjectSoa	Added section with content for this version of Windows Server.	Y	New content added.
2.449 Attribute msDS-ServiceAllowedNTLMNetworkAuthentication	Added section with content for this version of Windows Server.	Y	New content added.
2.459 Attribute msDS-SourceAnchor	Added section with content for this version of Windows Server.	Y	New content added.
2.462 Attribute msDS-StrongNTLMPolicy	Added section with content for this version of Windows Server.	Y	New content added.
2.471 Attribute msds-tokenGroupNames	Added section with content for this version of Windows Server.	Y	New content added.
2.472 Attribute msds-tokenGroupNamesGlobalAndUniversal	Added section with content for this version of Windows Server.	Y	New content added.
2.473 Attribute msds-tokenGroupNamesNoGCAcceptable	Added section with content for this version of Windows Server.	Y	New content added.
2.481 Attribute msDS-UserAllowedNTLMNetworkAuthentication	Added section with content for this version of Windows Server.	Y	New content added.

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